FRONT COVER

Public value management

Institutional design and decision for the common good

Edited by Rick Wylie

BACK COVER

BLURB

In a world where the human experience is increasingly overshadowed by diversity and danger and which is currently confronting the twin challenges of a global recession and pandemic, this book provides an insight into the fundamental idea of public value which represents the 'humanisation' of public policy and practice.

This edited volume brings together a unique set of experts from policy, commerce and academe who, in a series of case studies in the space, energy, tourism and higher education sectors, discuss how public value may be assessed, appreciated and articulated.

The book describes an approach to public value management for organisations working in complex networks. It focuses upon how they can appreciate their wider role and impact on society and accommodate diversity in new institutional structures.

TESTIMONIALS

Dr Wylie and his associates present a comprehensive and detailed guide and path forward for improving how public and private policy is prescribed, applied, and perhaps most importantly, appraised. Drawing on years and even decades of practice and reflection, this book is a culmination and distillation of lessons learned from many walks of life and sectors of society. For those who doubt we still can clarify and secure the common interest, this book will be both inspiring and a sure-footed guide.

– Andrew Willard, Experiential Learning Director, University of Iowa Honors Program; Past President, Policy Sciences Center, Inc. and the Society of Policy Scientists

There is a very poor understanding in practice of what 'Public Value' might actually mean let alone 'how' it might be assessed either before awarding and implementing or evaluating projects and public sector investment. Dr Wylie and his co-authors have made a major, and timely, contribution to the consideration and answering of these questions both from a policy and implementation perspectives.

– Professor John Fyfe CBE

ABOUT THE EDITOR

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Foreword

Meg Hillier

Mark Moore's concept of public value has rightly become one of the major ways we frame the question about what public servants should strive to do. At its core is an idea that is simple to comprehend, although more difficult to implement. That is, that we deliver public value if we have a good idea, get endorsement to act on that idea and implement it well.

It's easy to grasp, but much of my life is spent examining cases where, to put it politely, all has not always gone well.

If we take the three pillars of Moore's idea, we can see why. First, we have different ideas about what matters. That is the essence of politics. Different political parties give greater or less emphasis to different ideas. Secondly, most knotty political problems are ones where different values clash. We can see this in the current Covid epidemic. We have had to put limits on one highly regarded value, liberty, to protect another, public health. We also face intergenerational challenges. We have asked younger people to accept sacrifices in their education and work and leisure to help protect more vulnerable groups.

There is however a third dimension to this. Ideas rarely come perfectly formed. Most good ideas develop through an iterative process. Too often government policy is generated from a narrow decision-making class without enough interaction with the people who will deal with that policy in the real world.

Creating an authorising environment requires some level of trust. Creating support for a good idea is as important as having the idea.

I have called for government to consider scrutiny of projects before they start as I believe it is more likely that we will get both that iterative improvement and build backing for the idea.

The third leg is good delivery. Whether the public has had value for money is the bread and butter of the work of the public accounts committee, which I chair.

One of the great weaknesses of central government is the premium it places on policy, with delivery almost seen as an afterthought, usually delegated to more junior staff or outsourced.

While a large part of the public accounts committee role is to examine money – how it's spent and to challenge government waste, the committee also examines the effectiveness and efficiency of how our money is spent. But in the near decade I've served on the committee I also see that value is not just about these three critical measures.

There can be a wider value that falls out of public policy decisions and spending.

Every week I challenge civil servants about how they are adhering to strict treasury spending rules. I criticise government if they push these rules or break them. And I defend probity all the way.

But MPs are also champions of our communities. Civic pride and focus on key community needs are vital to the life blood of our constituencies. There can sometimes be a value beyond the cash accounting and the measurable outcomes. The pride that residents of Tower Hamlets in east London had for Henry Moore's Old Flo led to the winning mayoral candidate running on a platform to save it when his predecessor had promised to sell it to raise cash in one of the poorest boroughs in the country.

The current prime minister has a track record for spending money on projects variously called vanity projects, or white elephants – the Mittal Orbit in London's Olympic Park which allows adults to slide down a giant helter-skelter or the ill-fated Garden Bridge. People like me who watch how the pounds are spent are called out as naysayers when we challenge such projects.

So how do we measure the wider public value of a project? And how do we avoid undue waste and policy made on a hunch?

When my committee has examined Sellafield, for example, we can look at the public money going in. We can measure the outcomes against the targets and milestones that were set out at the beginning. But how do we capture the wider impact of this huge, publicly funded facility in the wider area. And how do policy makers work to deliver that wider benefit in a regime which still (and I defend this) measures with data, figures and outputs.

For a number of years, I've been following the exciting work of UCLan which has been grappling with this very question. As a working politician I can read theory, but I need to be able to apply it.

So, I'm delighted that this book is here. In essence it's a handbook for policy makers which, across a wide range of projects, seeks to help codify and measure the public value of major projects and institutions.

The pride in your area, the value that a government service provides in the wider community, the impact beyond the economy can be impossible to measure. The following pages help divine a way through from the theory to the practical.

And in the end if we want to make a difference we need to learn how and why public value has been delivered before. The wide range of projects in this book show that there is both public value and a way of evaluating it in every project or organisation.

1. Introduction

Rick Wylie

This book has been written to address a fundamental problem: how to achieve public value in the projects and policies that are matters of public concern. Throughout, our aim is to provide insights into how we can best measure, monitor and maximise public value. We discuss the lessons learned in working with a public value framework across organisations in the public, private and social sectors. The institutions that inform our case-studies are often associated with large-scale, environmentally sensitive industries, working within policy structures, partnerships and networks at the regional, national and international levels.

We began this project with the proposition that there exists an unparalleled opportunity to bring wider public values into the policy process. What we found is that when an organisation asks the question 'What value do we deliver beyond just the financial?', new answers emerge. Value is associated with impacts and outcomes that are essentially public benefits that are informed by human motivations. These answers force us to think about organisational outcomes, not just outputs.

In this book, we describe a programme of applied research which unpacks the notion of human values and public benefit. From the perspective of the wider public, value is fundamentally about the things people value and their basic needs. Integral to this is the relationship between them and their communities and societies. Public value is, therefore, about more than just people, it is about how individuals relate, live, connect and govern themselves.

The book was written at a time of extraordinary global crisis associated with the Covid-19 pandemic. It is a time of significant change and great uncertainty with massive structural issues affecting individuals in their daily lives. But there are other crises confronting governments and publics, including: climate change, Brexit, peak oil, globalisation and the rise of the global labour market, the decline in the manufacturing base in many western countries and an increase in knowledge and service workers, a shift of economic power Eastwards to Asia and China, fewer people being of working age, the increasing disparity between rich and poor, and post-truth politics.

These dynamics are leading to significant turbulence and uncertainty in the public sphere. The old world may be changed forever as a result of the pandemic, the social measures put in place to contain the disease, and the likelihood of a deep global recession in its wake. Today, people are recognising that the old order may have changed forever. Systems based on capital accumulation and exchange and economic values don't properly address the problems societies around the world are confronting today. As a consequence of these challenges, our societies are confronting increasing levels of anxiety, alienation and anomie associated with changes in society, a separation of the individual and a loss of contact, communication and certainty in what Beck (1992) referred to as the 'risk society'. These changes foreground the importance of human values, values beyond economics which, though still of vital importance, do not fully capture the human experience in contemporary society, nor the wider implications of economic activity. It may require what the World Economic Forum is calling a 'Great Reset' with a turn to more human values as a consequence of these profound changes. As John Maynard Keynes said:

"Only a crisis – actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable" (Milton Friedman 1982). We are clearly in a crisis, and, in keeping with Friedman, perhaps an appreciation of public value will prove to be one of the ideas that will be found 'lying around'.

Essentially, public value is about the creation of value for the common good. It's about individual lives in social settings and it reflects the relational nature of the human experience. A public value perspective re-scales the boundaries of an organisation in collaborative networks and new institutional forms, reimagining its impact to include the outcomes realised in the public sphere and recognised by citizens and stakeholders. Focused upon the entire constellation of human value categories and extending beyond money and administrative domains, a public value approach evaluates the real worth of organisations and of the contributions they make to society.

From the perspective of an individual, it is fundamentally about benefit to the public in the form of things they value and their basic needs, but it is also about the relationship between individuals, communities and societies. Public value is, therefore, about more than just personal value, it is about how people relate, live, connect and govern themselves. In what has become a new field of study, public value management emerged. It was considered by some scholars to be a new paradigm for considering public administration, rethinking government activities, service delivery systems and public policies (O'Flynn, 2007). But public value has many other meanings. It is at the same time:

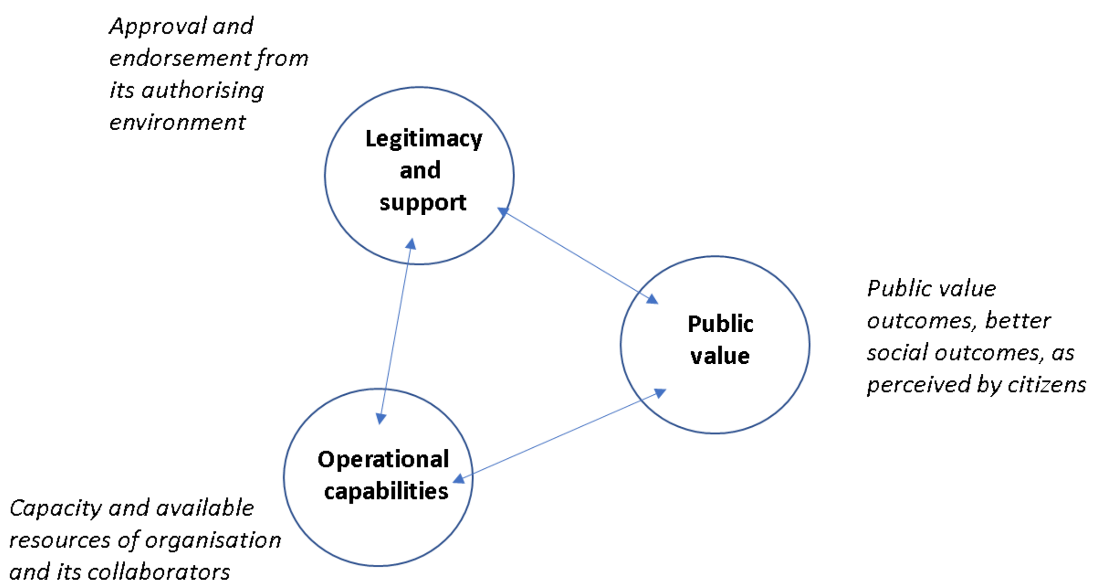
- what the public values;
- what can add value to the public sphere;
- a rhetorical device or a useful story;
- a plea to public service providers to revive the public sector;
- a distinctive kind of institutional governance based on networks;
- analogous to private consumer value created in the market by private companies;
- the central objective of government activity, and;
- the value of an organization to society.

As we will see in this book, public value is actually all of these things. Rather like Hokusai's elephant, what you see just depends on where you stand! Indeed, one of the strengths of the public value concept is its breadth and generalisability and the application of the core concept – human value – into policy outcomes and processes. It is important to recognise that all sectors actually produce public value. A public value approach gives an insight into the effectiveness of policies, practice, projects and programmes by focusing upon the often-envisaged outcomes while taking into account what matters to citizens.

To navigate our way through the maze of concepts and theories that are associated with public value and its management, we use the seminal strategic triangle drawn by Mark Moore (2005) which focused on the organisational level. This approach is rendered in figure 1 below.

Moore equated success in the public sector with increasing the production of value by an organisation to the public. He argued that to achieve public value, an organisational strategy must have the three elements aligned. Firstly, it must constitute public value; secondly, it must be legitimate and politically sustainable; and thirdly, it must be operationally and administratively feasible. Moore's (1995) framework proposed a strategic approach to public value "…which had to (1) create something valuable; (2) obtain legitimacy and political sustainability from the authorizing environment; and (3) be operationally feasible" (Moore, 1995, page 71; In Luca Papi, Michele Bigoni, Enrico Bracci and Enrico Deidda Gagliardo, 2018, page 503).

Figure 1.1: Mark Moore's Strategic Triangle (after Moore 2005)



We have used this framework to organise our work, and to structure this book. However, there are important questions left unanswered by this approach. One of the first things to consider is who are the public within which Moore's model is located? In a changing world, organisational capacity and capabilities are more often insufficient to address complex issues and 'wicked problems' (Rittel and Webber 1973) which are complex in their articulation and impossible to solve in a simple, final way such as climate change and perhaps Covid-19. To solve such problems often requires networks of actors interacting (Weber and Khademian 2008) and as we shall see in this book, networks involving the public are increasingly the norm in the co-production of responses and the implementation of measures to articulate and address complex and intractable issues. The public, in this discussion, is of course a fluid concept. Following Ostrom et. al. (1961) the 'public' may be envisaged as those who are touched by the indirect, positive, consequences of an organisation's outputs. These are not the consumers of a product or service, though we do not deny that this does produce public value and public value may be produced indirectly, or even unwittingly, from the purchase of products or the sale of services.

Today, the public sphere may, in this era of globalisation, satellite communications and the world wide web, be very broad indeed. The public impact of an organisation may be equally expansive. In a globalised, interconnected world, the boundaries of an organisation, and its impact, can extend well beyond territorial jurisdictions and commercial and contractual relationships. At the same time, the impact of an organisation extends to a wider public affected by the indirect consequence of its outputs and outcomes in ways which may be unforeseen. As we have found, the results of a first public value profile exercise can be very positive for an organisation by revealing value that was previously unappreciated.

The public value approach we articulate in this book which has been developed in collaboration with the European Space Agency (ESA), and separately with other collaborators, in real-world case studies comprises essentially two parts. Firstly, it is about defining and measuring public value, what Moore refers to as value in the task environment in the diagram above. This is based upon external assessments of the value perceived to be produced by an organisation, and following Meynhardt (2009), this is based upon assessments of value made by ordinary citizens.

The second public value management element of our approach gives an appreciation of the dynamics of public value as an asset for an organisation within its policy environment, and an appreciation of public value as a currency in the political economies within the authorising environments in which organisations exist. It also focuses upon how an organisation must act, interact and react to optimise its value as perceived by the public. This second element of our approach covers the organisational implications of working with and within public value both at a strategic and an operational level. This takes into account the realities of networks and collaborations in the delivery of outputs and the realisation of outcomes, and the sometimes-vital role a public value profile plays in the defence of an organisation's mandate in its authorising environment. The term 'public value' requires further clarification. Essentially, we take it to mean the realisation of value by individual citizens through the lens of their needs and motivations. Fundamentally, public value is about the realisation of value in the public sphere, in people's everyday lives, their families, neighbourhoods and places.

Thinking of organisational implications of the 'public', a public value perspective brings into view the boundary issue of an organisation. There are two elements to this. Firstly, the hybrid nature of public policy and projects result in collaborations between organisations and across sectors; and secondly the engagement of citizens, communities and collaborators in the co-production and co-design of public facing outcomes.

The fundamental issue with public value for any organisation is to appreciate its impact upon the public sphere (Moore, 1995; Meynhardt, 2009). To achieve this, we focus upon evaluations by individual citizens to acquire their perceptions of an organisation, policy, project, product or programme to the public sphere, to the daily lives of ordinary citizens. We draw upon a psychological approach to public value to create a profile based upon an assessment by members of the public of the value they associate with an organisations' activities.

This approach is based upon a proven, tested framework of human values and the needs and motivations underlying them. We use two leading approaches (Datler 2013) to value measurement and interpretation, those of Shalom Schwartz (2012; Schwartz et al 2012) and Ronald Inglehart (1977, 1981, 1985, 1990). Together, these frameworks give a robust assessment of public value outcomes based upon human needs, values and underpinning motivations together with an analytic framework for its interpretation.

The second part of our approach relates to organisational capacity and, in particular, the complex network and new institutional forms of today through which organisations collaborate to make up for a lack of capacity in addressing complex issues.

To address the complexity of this field, we draw upon Ostrom's Institutional Analysis and Development (IAD) framework (Ostrom 2006, 2010) to look at policy and decision-making at multiple levels, and at the range of factors bearing upon them. Two key issues are addressed by using the IAD framework. The first issue is the polycentric nature of political power and decision-making agency that are inherent in complex institutional and stakeholder structures. The second issue concerns how to resolve the heterogeneous nature of human values and values perspectives which stakeholders, citizens and state actors bring to bear on issues. As we shall see, a public value approach addresses and goes some way to resolving this intractable issue by focusing on the entire constellation of values.

This book develops its insight through a number of case studies each focusing on the relationship between an organisation, its policies and practices and the public.

In **part one** we cover the identification and measurement of public value and introduce a framework approach to its measurement and interpretation. We also bring the concepts of social justice and social value to bear upon public value. Three case studies involving a public value assessment have been developed and implemented in collaboration with organisations that are involved in the public policy arena. Each of these case studies gives a different perspective on the achievement of public value. For all these organisations, a public value perspective was achieved using tools and techniques based upon the work reported in chapter two. These are:

- Firstly, with the Nuclear Decommissioning Authority (NDA) – the UK Government's nuclear facility management organisation, which provides a study of the public value

profile of the nuclear industry in Caithness at the Dounreay nuclear site and the Nucleus Nuclear and Caithness Archive.
- Secondly, with the National Nuclear Laboratory (NNL), a private sector laboratory working in nuclear science for the UK Government and commercial clients at the local, national and international levels. For this organisation a public value profile among its key stakeholders probing and its wider role was undertaken largely in west Cumbria.
- Thirdly, the European Space Agency (ESA) is the European space science and technology organisation with whom we undertook a public value profile exercise in France and Italy, the results of which were ultimately used to inform their strategy.

In **part two** we work alongside practitioners to consider the implications of working with public value in institutional structures by drawing upon the institutional analysis and development insights from Ostrom's framework approach. This includes:

- The first case study of working with public value is of the nuclear industry in west Cumbria. Here we look at how the local political-economic context and discourse influences the recognition and pursuit of public value.
- The second case study looks at the tourism industry under the Covid-19 pandemic and reflects upon the wider public value associated with the visitor economy, especially the dialogue between host and visitor publics which foregrounds the role of the locality in addressing complex policy problems.
- The final case study, which looks at a regional civic university. In it we draw upon our own experiences in UCLan in the early stages of creating a public value institution. We discuss how a public value perspective is revealing of the contribution a university makes to the civil society within which it is embedded and the management implications of a public value approach engaging with staff and stakeholders in collaborative structures embedded in the global knowledge economy and regional innovation networks

It has been suggested that a public value management approach highlights collaboration and relationships rather than competition for scarce resources. This project has revealed the importance of a value perspective based upon individual citizens in their daily lives. Ultimately, it has been argued that all politics is local, and the emerging public value management paradigm reflects the reality of networked governance and the motivations and needs of all participants. Moreover, humans are social creatures, and the relational qualities and processes of governance structures should be recognised as providing value in the relational domain.

2. Public value and human values

Rick Wylie

We begin this investigation by discussing the concept of public value and why it is becoming increasingly important to consider stakeholders and states of affairs through its lens. Through developing a public value perspective, we will look at policies, projects and institutions in a way that considers human needs and wants, and also appreciates the impact of what humanity does to the world in which we live. In an era of increasing alienation from nature, from society and even from ourselves, the emergence of a public value paradigm places the interests, motivations and needs of the individual human being front and centre in terms of policymaking and practice. A public value approach is essentially democratic and inclusive, as it considers things in a way that takes the complexity of the world and the diversity, interests and heterogeneity of humanity and the human experience into account.

The basic structure of our investigation reported in this book is informed by the logic of Mark Moore's public value strategic management framework (2013). This chapter is an overture to the case studies in this book and in it we introduce key concepts associated with public value and public value management. Concentrating on the perceptions of citizens and the basis of their judgments, we develop a defensible, grounded approach to creating a public value profile for a policy, project or programme based on the contributions of leading theorists and scholars in this field and in the field of human values upon which we develop the methodological approach used in the case studies that we investigate.

Introduction

Today, governments increasingly focus on more than just economic value in their evaluation policies and for the justification of spending, and on 'softer' outcomes rather than 'hard' outputs. After decades of policy shaped by neoliberal ideology, foregrounding financial targets which were driven by the commercialisation, competition and contractorisation of the public sector (in which economic efficiency and financial targets were key drivers), there is today a turn towards public value management. Now, a new view of value is coming to the fore, one that recognises the impact that organisations have in the wider public sphere as well as the positive implications that public value realisation has on an organisation's mandate, which requires new modes and methods of strategic management to respond. In a report for UK Government 'Delivering better outcomes for citizens: practical steps for unlocking public value', Elizabeth Truss MP Chief Secretary to the Treasury wrote…

"We need to track how we turn public money into results for citizens. We need to understand the impact each pound spent has. And we need to prioritise to ensure that resources are allocated to where they will be most effective."

(UK Treasury 2017, preface)

Across Europe and in many countries around the world there is a turn to recognising and realising 'results for citizens' public value as a mode of public administration (Stoker 2006). In public administration today, as society confronts complex, contested and large-scale issues like climate change, values beyond economic efficiency and effectiveness are increasing salient for policymaking and politics (Bryson et al, 2014).

Writing in 1965, David Easton argued that politics may be defined as "…the authoritative allocation of values…", but did not, however, specify any clear definition of values (Easton, 1966). In recent years, an increasing amount of attention is being paid by policy makers, politicians and the general public alike, to the consideration of human values. This shift to foregrounding public value and the needs of citizens and society is a move beyond economic value as an end in itself, towards values being expressed at the level of individual, both in respect to their basic physiological needs, as well as through the things they derive value from through their interactions in society.

Insights from a public value perspective give a wider-than-financial appreciation of the value of an organisation, its policies and practices from the perceptions of ordinary human beings based upon their contribution to individuals' daily lives. Centred on human rather than economic value this perspective reflects citizens' perceptions of its contribution – made as much by process as by substantive outputs – to the public sphere. If politics – and policy – is about the authoritative allocation of values, then a public value perspective opens a wider window upon the public sphere foregrounding fundamental human values and the contribution an organisation, project or policy makes to their realisation.

Increasingly, public participation and the language and values of human beings and the notion of the public sphere form a key part of the operation and evaluation of organisations in public, private and social sectors. A public value perspective places individual humans – and what they demand and desire as individuals – at the heart of the valuation process. As a mode of *governing*, public value foregrounds values beyond economic efficiency and effectiveness (Bryson et al, 2014) and dialogue with the public. As a mode of *management* it requires an appreciation of the wider consequences of soft 'outputs' rather than hard 'outcomes' and a contribution-orientation which brings into focus the everyday lives of ordinary people and how an organisation, policy, project or programme contributes to the things they value in their lives.

Especially today, in a world of complex, contested and intractable issues – so called 'wicked problems' delimited in scope and scale and with no clear solution or end point (Rittel and Webber 1973) – and fiscal crises that limit the power of the state, public value is of increasing importance and its achievement is an urgent issue facing policy makers and managers involved in public projects. Across the policy community, and more widely in the private and social sectors, questions are increasingly being asked about the actual social and public benefit of products, practices and services produced with public resources (Moore 2014). It recognises that not all value is captured by economic measures and that much of the real value to individual citizens may actually go unrecognised.

The ‘value set’ upon which we base the approach we describe are universal and will be recognised by citizens around the world. They are neither culturally nor regionally specific and are widely recognised and appreciated. The same value set is not, however, equally prioritised by individuals in different life situations as biographical, cultural and geographical settings shape their prioritisation at an individual level. However, human values as we discuss in the following section are, in effect, ‘public’ values in that all citizens will recognise and appreciate them – even if their own value set is composed differently. Human values are both democratic and inclusive, two prized qualities in a complex, conflicted and increasingly challenged world.

Public value

Public value is an intensely practical concept. It is about the perceived fit between a referent, policy, service, project or programme and individuals living their daily lives in homes and neighbourhoods, at the workplace. To experience public value is to achieve things we seek to realise in our daily lives, things which motivate us and to which we aspire as we develop our life narratives. For an organisation, it is how its policies, projects products or programmes facilitate this. Public value is about individuals acquiring things that matter to them and that motivate them. it is everywhere and filters into every corner of their lives. Public value is often indirect, unappreciated and ultimately democratic.

For an organisation, public value may be thought of as being composed of ‘positive externalities’ and for the public, as something that is perceived as valuable, and in this context the perceptions of the public are vital and following Meynhardt:

“Public value is value for the public. Value for the public is a result of evaluations about how basic needs of individuals, groups and the society as a whole are influenced in relationships involving the public. Public value then is also value from the public, i.e. ‘drawn’ from the experience of the public Any impact on shared experience about the quality of the relationship between the individual and society can be described as public value creation” Meynhardt (2009, 212).

From the standpoint of public administration, the emergence of public value represents a wider administrative transition beyond traditional public administration and the so-called new public management approach (Hood 1991) with its emphasis on economic efficiency and financial performance. This approach to public value management is a response to the challenges of a complex, networked, multi-sector world. In today’s complex, connected and networked world in which clusters of organisations seek to address wicked problems like climate change, poverty and pandemics, the limitations of previous public administration approaches for addressing the common good are revealed. In this new approach, values beyond efficiency and effectiveness—and especially democratic values—are prominent and in this new world, government has a special role to play as a guarantor of public values. Moreover, citizens as well as businesses and non-profit organisations are also important as active public problem solvers (Bryson et al 2014).

Today in public, private and social sectors, the impact of complex, large-scale projects and policies has become intertwined. In communities of policy and practice, large-scale 'megaprojects', like the HS2 high speed railway project in the UK, complex policy solutions require organisations to work well beyond their boundaries with and within a global society, and within new multi-sectoral policy structures. These new architectures shape the world in which we live and impact our daily lives, often in unintended ways, and increasingly draw the public in to co-produce outcomes and outputs.

A public value approach foregrounds the relationship between policy and citizens using assessments of outcomes based upon human values in respect of the outcomes associated with them. For an organisation, public value represents a way of looking at its wider contribution to society, using an approach based on the basic needs and desires of individual citizens arranged in salient 'publics'. This emerging public value perspective goes beyond financial and operational values such as effectiveness and efficiency, and places individual humans and what they demand and desire as individuals at the heart of the valuation process (Bryson et al 2014).

From the standpoint of management control, a public value approach asks new questions of the organisation and its role in society. Fundamentally, this involved asking not if an organisation is doing things right, but instead, is it actually doing the right things? These new questions are about the influence of organisations (i.e. policies and projects) on the public sphere and on the common good. It reveals the breadth of this impact, sometimes unforeseen, upon individual lives and foregrounds the benefits received in the public sphere as a result of these actions.

There are a number of approaches to understanding and working with the concept of public value. Some are based on what public sector managers should do, and, to a certain extent, how they should do it (Moore 2013). Others look at policy and societal levels (Bozeman 2007; Beck Jorgensen and Bozeman 2007) addressing what society and policy should provide. Few, though, give measurable and defensible insights that are grounded in concepts of human value, with the likes of Meynhardt (2012) and Bryson et al (2014) being important exceptions. The approach these authors pursue, which we draw upon and develop in this volume, is based upon the notion that public value is "…constructed out of values characterising the relationship between an individual and society…" (Meynhardt, cited in Bryson et al 2014). Significantly, this is framed as a two-way relationship with individuals drawing value from the public sphere and also contributing to it.

In developing a framework approach to understanding public value, we foreground the concept of human values and devote a substantial part of this chapter to unpacking and exploring this concept of values, while taking into account the social and cultural settings in which individual citizens live. Drawing on Meynhardt (2012) we see the dialogic nature of public value and its origin in interactions with and within the public sphere. This relational quality of the human experience is, as we shall see later in this chapter, a fundamental aspect of human values and a key aspect of public value deriving from interactions in the public sphere reflecting the social nature our lives and the relational, as well as the personal and physiological, aspects of human value.

In this chapter we discuss the key concept underpinning the idea of public value, that is rooted in an understanding of human values and that draw upon proven models and approaches. We distil the fundamentals of the principal theorists associated with the conceptualisation of values, unpacking the elements of values and their substance, and revealing the reality of values as principles for guiding individual action and attitudes. We also develop an approach to measuring public value based upon a synthesis of a number of theories and approaches that are explored and refined through real-world case studies.

The public sphere

The concept of the public sphere is an essential element of the appreciation of public value. Essentially, the public sphere is the sphere of the realisation of values associated with an institution or an issue. The concept describes the sum of experiences of interactions between individuals and the social setting in which they live, it is an emergent concept it exists and comes into being through an iterative process of dialogue and experience. As Benington argues, the public sphere is a living space that includes the *"…web of values, places, organisations, rules, knowledge, and other cultural resources held in common by people through their everyday commitments and behaviours, and, from a public value management perspective…held in trust by government and public institutions.".* The public sphere is *"what provides a society with some sense of belonging, meaning, purpose and continuity, and which enables people to thrive and strive amid uncertainty"* (2009, page 235). The key point about the public sphere from a public value standpoint is that it is constantly constructed and reconstructed – it is not static, or a given (Dewey 1927/1954). Public value is necessarily contested and is established and 'maintained' through a continuous process of dialogue. For Benington, the public sphere is thus the space – psychological, social, political, institutional, and physical – within which public values and public value are held, created, or diminished. Essentially a democratic space, the public sphere is a term that describes the sociocultural environment of our everyday commitments and behaviours.

From a public value standpoint, the public sphere is a key concept. It is a way of expressing the critical link between the individual and the wider public. Basically, public value equates with what adds value to the public sphere – or put another way, contributes to the Common Good. Essentially, public value is constructed in a dialogue between individuals and the social world they live in and interact with, and includes people, policies, projects and organisations. We all contribute to it and also draw upon it constantly. As Meynhardt (2009, page 212) puts it, *"…public value is for the public when it concerns evaluations about how basic needs of the individuals, groups, and the society as a whole are influenced in relationships involving the public"* (cited in Bryson et al 2014). Public value is also about value from the public, when it is *"drawn from the experience of the public."* Public value for Meynhardt, too, can refer to input, process, output, and outcome measures (Bryson et al 2014 page 450). Clearly, the relationship between an individual citizen and the public – and public sphere as a 'space' – is a key aspect of the concept of public value.

Essentially, a public value 'take' on the public sphere argues that individuals derive value from the public sphere and hence public value is, following Meynhardt, the ability of the public sphere to impact positively upon that relationship and to enhance the capacity of the public sphere to provide things valued by its citizens. From the perspective of a project or policy these 'valued outcomes' may be wider than envisaged and may be unforeseen. NASA's Apollo human spaceflight programme, for example, had an enduring public value outcome (among many) of the image of Earth from the Moon – including the enduring 'Earthrise' photograph, which is perhaps the most famous photograph of all time which helped to kickstart the environmental movement. However, the impact of that image was largely unforeseen and was essentially a snapshot, but one that continues to inspire and inform to this day.

An important element of a public value approach is the concept of the 'public sphere' – the wider contribution public value makes to the scope, structure and substance of socio-political space. To benefit from value produced by the European Space Agency (ESA), for example, you don't have to work for the organisation, nor do you need to be a supplier or to travel into space. As we shall see, ESA produces public value, to a greater or lesser extent, across the board in *all* categories of human value. An overarching definition of the public value contribution of an organisation is, simply put, its contribution to the public sphere.

In sum, public value management lies at the intersection between institutional outputs and individual values. In today's globalised, networked and complex world in which the scope and scale of the outcomes of an institution may be unforeseen, unrecognised and unappreciated, the concept of the public is used flexibly to assess the scope and scale of outcomes. In our public value project we follow Meynhardt who envisaged the public as an *"indispensable operational fiction necessary for action and orientation in a complex environment."* (2009, 205). Fictional it may be, but it is fundamental to the appreciation and evaluation of public value and of the identification of the community of citizens who realise the outcomes of particular institutional outputs. In the following section we turn to the basis of their evaluations.

Human values

Essentially human values can be regarded as beliefs upon which we act by preference (Rokeach 1973, 1979). Shaped by our physiology, our culture, background, biography and context, they are enduring, cross-situational guiding principles for our lives, and the term 'value' refers to something, which – for whatever reason – is emphasised in reality, and is desirable for the one who evaluates it (Williams 1979). Thus, values are powerful, if abstract concepts.

We use the concept of human value to describe how individuals make sense of the world they live in. They are psychological drivers that determine the orientations and behaviour evoked in response to an individual's interactions with the world they inhabit. They merge feelings, with objects and issues that individuals confront in their daily lives. The term describes ideals (Hitlin et al 2004) rather than attitudes (which are underpinned by values and which tend to be more specific). Values may be said to be more central to the person, to the individual human, than attitudes or beliefs, reaching into their cognitive make-up. Humans, Rokeach (1973) argues, may be seen as constellations of values – as cognitions which shape human drive and desire in the wide world.

At the heart of the concept of public value is the delivery of valued outcomes to humans – but what is actually of value to humans? That is the subject of the rest of this chapter. As we shall see, the concept of value is perhaps the essentially human construct and its, sometimes ambiguous, nature and plurality of definitions can make appreciating and using the concept of values rather difficult. Invisible and impossible to measure directly, we can only infer their existence from attitudes towards things and from observed behaviours. But values are, it is argued, deeper than attitudes in the human consciousness – they shape our behaviour and orientation towards things and influence our likes dislikes and motives. Crucially, though, values are also shaped by the environment in which we live. So, our values are influenced by where we are, where we have been and what we have done and do. From the standpoint of public value, individuals reach into their values to evaluate objects, issues or things which they encounter in their lives. Abstract and invisible to the researcher, values can't be measured directly, and simply put they may be understood as beliefs upon which we act by preference (Rokeach, 1973, 1979)) about desirable end states or behaviours guiding our selection or evaluation of objects, issues, behaviour and events. Essentially, values are desirables – modes of conduct and end-states (Rokeach 1973, 1979) and they are ultimately desirable and forceful for an individual evaluator, influencing their attitudes and behaviour.

Perhaps one of the key aspects of values is their temporal dimension. Values connect the eternal past of heritage, history memories policies, practices commitments and relations, with the perpetual present within which we live, and in which we make decisions about the future in an uncertain, complex and risky world. Values and the concept of human values can therefore be seen as providing a bridge between the past, present and future. Conceptually, they give an explanation for the trajectory of individual lives and individual aspirations for a future based upon an eternal past in our perpetual present. Values are enduring beliefs that something is preferable – both for the self and for society (Rokeach 1973). Values are guiding principles in an individual's life (Schwartz 1994) which individuals use to evaluate and explain things.

In the context of a discussion about public value, the concept of human values comes to prominence as the basis by which people judge things and provide goals that individuals pursue in their lives. The importance of values as goals is used in this discussion where we follow Meynhardt (2017) who argues that public value reflects basic needs form the fundamentals of public value – they are its foundation. Drawing upon a relational conception of values, Meynhardt argues that value is created by the individual and, following Heyde (1926), that value is the outcome of a relationship between a subject and an object. Value does not exist independently of an evaluator but is created in their mind and what we term human values are a concept to understand the relationship between individuals and their social, political, economic and natural environments.

In a seminal contribution (1973, 1979) Milton Rokeach makes four important points which are especially relevant to the evaluation of public value,

- Firstly, that the total number of values that a person possesses is relatively small;
- Secondly, that everyone, everywhere, possesses the same values to a varying degree;
- Thirdly, that they are organised into value systems; and
- Fourthly, that human values are enduring and cross-situational.

These abstract concepts are key to our approach to public value profiling, perhaps most usefully, that only a few values *"…can constitute the organising principles for thousands of specific beliefs and attitudes…"* (a point also made by Williams in Rokeach 1979).

We turn now to an approach to measure public value based upon the perceived relationship between a referent and the contribution it makes to the public sphere as perceived by individuals seen through the lens of their values. To give an assessment of public value, we draw upon a psychological approach to public value Meynhardt (2009; 2015; Meynhardt and Bartholomes 2011) which we enhance and unpack using two leading approaches (Datler et al 2013) for understanding human values, their motivations (Schwartz 1987; 1994; 2012; Inglehart 1977; 1981; 1990; 1997) and the impact of context upon them.

We also draw upon theories from Alderfer (1969) and Maslow eg (1943, 1954, 1962) to incorporate the concept of human needs in a dynamic framework which gives the foundation of value associated with this public value investigation in detail. We use these proven theories of human values as a fundamental underpinning for the acquisition and interpretation of value data underpinning public value. In this, the relationship between an organisation and the public sphere is the essential focus of investigation, as Meynhardt suggests (2009, cited in Meynhardt and Bartolomes 2011)

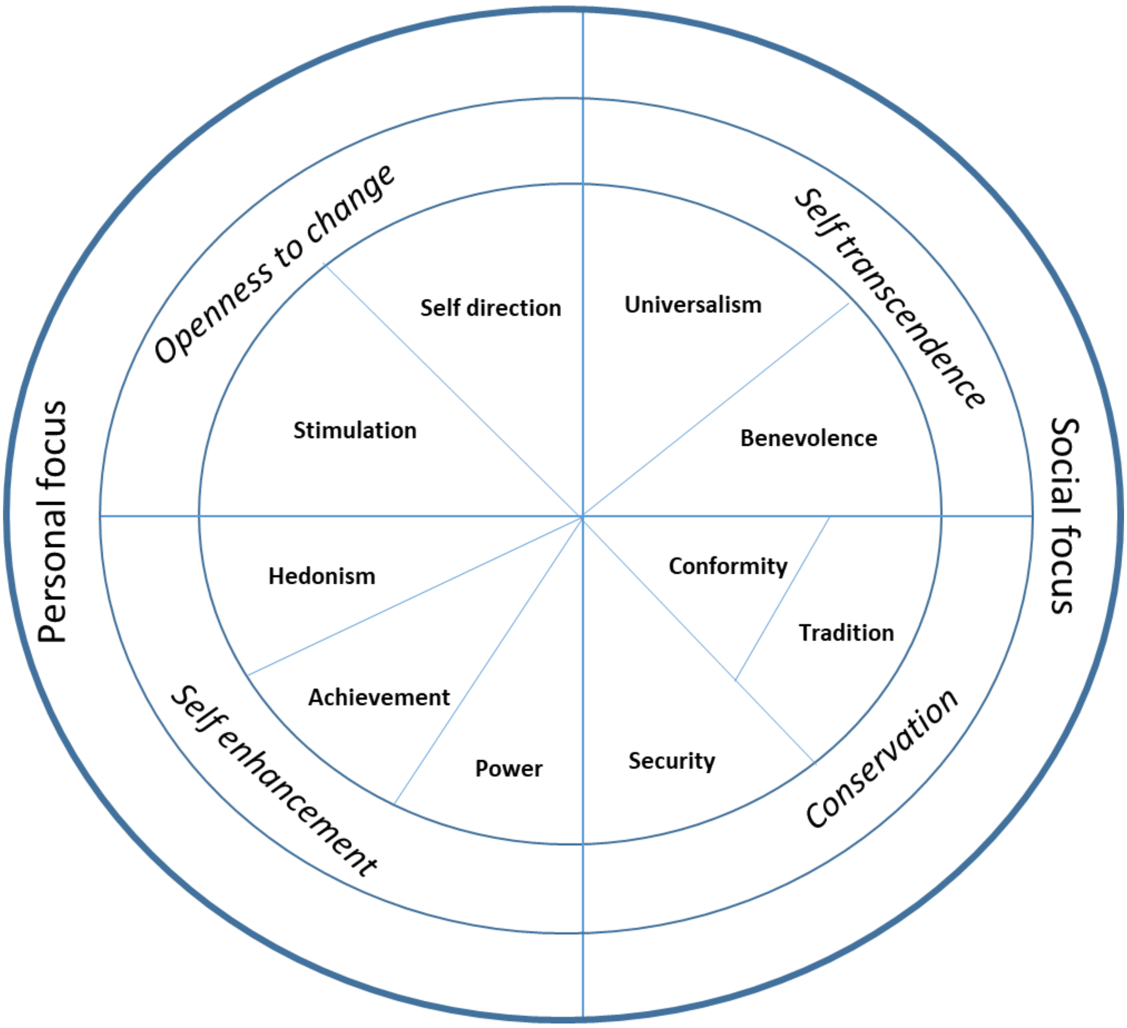
Invisible yet impactful, values give individuals stability and predictability across social settings. Essentially, they are cognitive maps which help us navigate the broad ocean of complexity we encounter in our daily lives and are at the heart of most of the things we do as human beings. They are, of course, a conceptual construct. Essentially, *public value* is created by something if it is perceived to have a positive impact in the public sphere as assessed by members of the public against their individual values.

Perhaps *the* defining feature of public value is its foundation upon the achievement of value by members of the public assessed against their needs and motivations. In the case studies section of this book, we consider three theories of human value which, taken together, are revealing and insightful in suggesting a dynamic structure within the overall set of human values, and which allow further evaluation of the value contribution to the public sphere to take place.

Following on from a public value standpoint, a key observation is that, following Schwartz (2012), all humans hold the same overall set of value categories, but the strength and priority of their *personal* value set is determined by biography and context. Values are, on the one hand, what give individuals a degree of stability and certainty, but on the other hand, they can be what differentiates individuals and groups of humans. Different people will hold the same value set but in a different (sometimes very different) order of priority.

In our assessment of public value, we focus on the approach of Meynhardt (who drew upon Epstein, 2003) and Schwartz (2012) whose 'value circle' is one of the most widely used representations of human values. Rendered in diagrammatic form below the values circle shows a relational perspective on human values seen as a set of ten categories in which related values lie adjacent to one another and values which conflict (such as self-interest and benevolence) are located on opposite sides of the diagram.

Figure 2.1: The Value Circle (after Schwartz, 2012)



Broadly the ten values categories may be organised into four groups of values, namely:

- 'Openness to change' values that emphasize independence of thought, action and feelings, and readiness for change;
- 'Self-enhancement' values that emphasise the pursuit of one's own interests and relative success and dominance over others;
- 'Self-transcendence' values that emphasise concern for the welfare and interests of others;

- 'Conservation' values that emphasise order, safety, self-denial, preservation of the past and resistance to change.

Later Schwartz and colleagues unpacked six of the original ten value categories into further subcategories and added two more value categories which give a total of nineteen value categories against which a referent could be assessed. This to give *"…greater heuristic and explanatory power…"* (Schwartz, 2012) in the use of the data acquired using this value circle framework. The nineteen-value category model with the underlying motivational components of each value (in brackets) is as follows:

Personally focused values

Self-direction–thought (Freedom to cultivate one's own ideas and abilities) and self-direction–action (Freedom to determine one's own actions);

Stimulation (Excitement, novelty, and change);

Hedonism (Pleasure and sensuous gratification);

Achievement (Success according to social standards);

Power–dominance (Power through exercising control over people) and power–resources (Power through control of material and social resources);

Face (Security and power through maintaining one's public image and avoiding humiliation);

Security–personal (Safety in one's immediate environment);

Socially focused values

Security–societal (Safety and stability in the wider society);

Tradition (Maintaining and preserving cultural, family, or religious traditions);

Conformity–rules (Compliance with rules, laws, and formal obligations) and conformity–interpersonal (Avoidance of upsetting or harming other people);

Humility (Recognising one's insignificance in the larger scheme of things);

Benevolence–dependability (Being a reliable and trustworthy member of the ingroup) and
benevolence–caring (Devotion to the welfare of ingroup members);

Universalism–concern (Commitment to equality, justice, and protection for all people), universalism–nature (Preservation of the natural environment) and universalism–tolerance (Acceptance and understanding of those who are different from oneself).

As will be seen in a later chapter, Schwartz's categorisation of nineteen value categories was used for the acquisition of data relating to ESA's public value profile and the results of that form the basis of that chapter. For the west Cumbria nuclear industry and the Nuclear Decommissioning Authority's national archive facility in the north of Scotland 'Nucleus' assessments discussed in later chapters we use Schwartz (2012)'s ten categories and for the initial assessment of the Dounreay nuclear facility we used Maslow's (1943) initial five categories of basic needs. Fundamentally, all of these value categorisations seek to tap the same cognitive reservoir and provide insights revealing awareness of activities and practical guidance into which motivational domains they need to explain or improve their performance. Each categorisation, in its own way, gives an insight into the relationship between values within the overall value set, and the theory of postmaterialism (Inglehart, 1990) relates value priorities to wider developments in the public sphere and to trends in society.

The hierarchy of needs (Maslow)

In the 1940s, Abraham Maslow deduced a set of human motivations based upon basic human needs which embraced physical, relational and cognitive needs and motivations which he arranged as a hierarchy. Today, Maslow's 'Hierarchy of Needs' remains an influential, heuristic approach to the evaluation of human needs and motivations which continues to prove influential more than seven decades since its first introduction. Broadly speaking, the 'Hierarchy of Needs' gives a dynamic, sequential approach to understanding the relationship between value categories. Essentially, Maslow posited a hierarchical relationship between originally five and ultimately eight categories in which individuals look for fulfilment of their 'basic needs' or deficiency needs, before prioritising the so-called 'higher order' or growth needs associated with relationships, self-realisation, discovery and achievement. These are shown on the diagram below in the triangular form usually used to represent his hierarchical model. Essentially, individuals are motivated by the 'pull' of the next unsatisfied value or need in the hierarchy and this dynamic has been proven in many studies over the years (eg Taormina and Gow 2013).

The enhanced Maslow hierarchy of needs is especially useful in a public value context in that it provides the basis for a dynamic interpretation of values data and for the arrangement of value categories. What is especially interesting are the revisions Maslow made to the original five-category hierarchy. Essentially, he unpacked and expanded the higher order self-actualisation category into four values which Alderfer would include in his 'growth' category – the so-called 'being needs' associated with self-fulfilment. The expanded Maslovian eight category model (Maslow includes the following…

- Biological and Physiological needs – such as air, food, drink, shelter, warmth, sex, sleep.
- Safety needs – such as shelter from elements, security, order, law, limits, stability.

- Social Needs – Belongingness and Love, – such as work group, family, affection, relationships.
- Esteem needs – such as self-esteem, achievement, mastery, independence, status, dominance, prestige, managerial responsibility.
- Cognitive needs – such as knowledge, meaning.
- Aesthetic needs – such as appreciation and search for beauty, balance, form.
- Self-Actualization needs – such as realizing personal potential, self-fulfilment, seeking personal growth and peak experiences.
- Transcendence needs – essentially helping others to achieve self-actualization.

(Maslow 1970, a and b).

Existence, relatedness and growth (Alderfer)

A somewhat less well known theory associated with Maslow's hierarchy of needs is that of Clayton Alderfer (1969), which posited that Maslow's hierarchy could be usefully summarised into the three categories of 'existence', 'relatedness' and 'growth' (ERG) (1969) which he proved empirically and has recently proved instructive in projects as diverse as telecommunications (Yang et al, 2011) and financial services (Botha and Venter, 2016).

The three categories of need in the 'ERG' model may be described as:

- **Existence needs** include those needs that relate to the existential, physiological and safety aspects of human beings. They are a prerequisite for survival and include both the physiological and safety needs of Maslow.
- **Relatedness needs** reflect the fact that humans are social creatures. They relate to social needs, those with whom an individual seeks to establish relationships, those for whom they care and with whom they value interaction. These needs cover Maslow's social needs and esteem needs derived from individuals' relationships with other people.
- **Growth needs** cover Maslow's self-actualisation needs as well as a part of esteem needs which are internal to the individual, such as a feeling of being unique, personal growth, etc. Thus, growth needs are those that influence an individual to explore and pursue their maximum potential in the environment they live and seek, including cognitive, aesthetic and wider transcendental needs.

A key difference with Maslow's model is the reduction of value categories (shown in the diagram below,) from eight to three, and the observation that values may not be sought or satisfied in an ascending order. Thus, value satisfaction or frustration need not be achieved sequentially or hierarchically. Fundamentally, however, it does not assume that lower level satisfaction will always result in the pursuit of the satisfaction of higher order needs, such that high order value categories may not replace the pursuit of more basic needs, but instead they re-arrange the priority accorded to them. To paraphrase Inglehart (1971, 1977), man may not live by bread alone, but he (or she) always needs it!

Postmaterialism theory (Inglehart, 1971, 1977, 1990)

This sequencing and substance of the original Maslow hierarchy informed work by Inglehart in the 1970's into what has become a widely accepted approach to categorising human value clusters. Following Maslow, Inglehart defines two value groups based on Maslow's deficiency and growth motivational needs (which he termed 'material' values) with the higher-order growth needs associated with self-actualisation and relationships being termed 'postmaterial' values. Inglehart contextualised value prioritisation in terms of socialisation and scarcity (of safety and physiological resources), arguing that the decades in the second half of the 20th century had seen unprecedented levels of affluence in western democracies which had influenced the value priorities of new generations and which had consequently resulted in political change. With their increasing focus on postmaterial values which reflected the prioritisation of relationships, freedom of expression, participation and the natural environment, 'postmaterialists' had a significant impact on politics and policy.

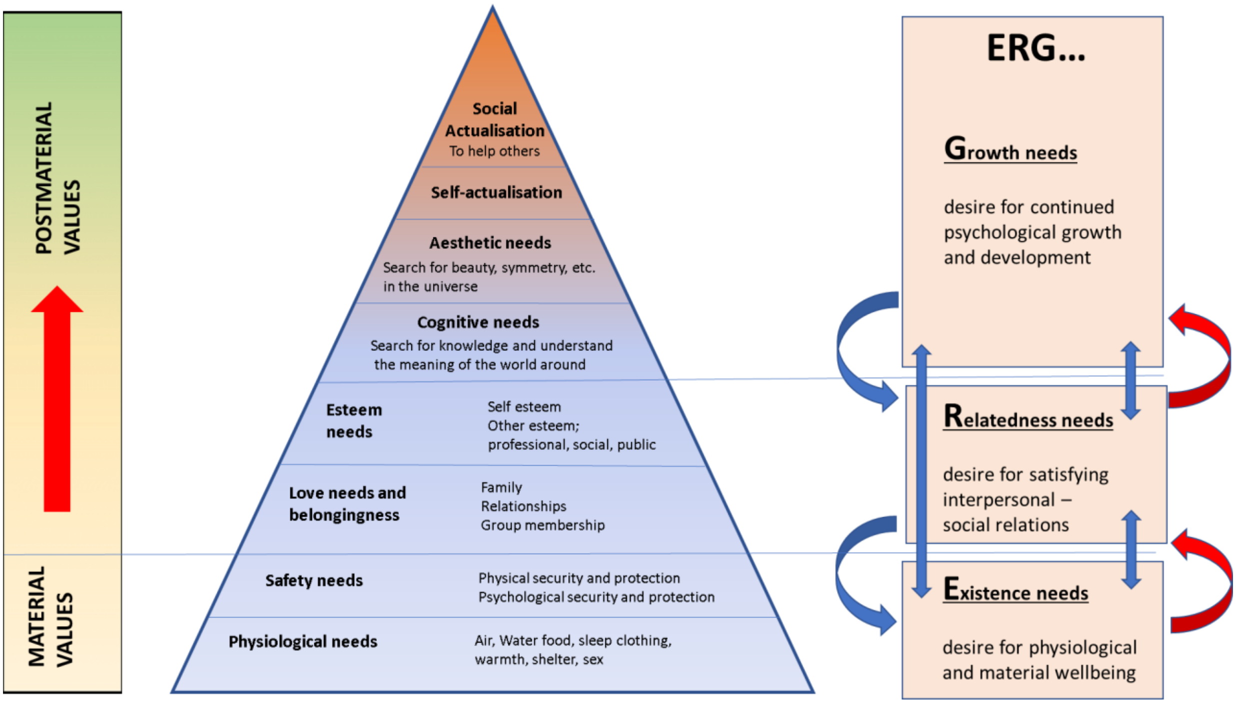
Inglehart (1977) argues that the two underpinning hypotheses, scarcity and socialisation could, in a time of crisis (like Covid-19) cause those prioritising postmaterial values to revert to material values in a time of scarcity and existential threat. Inglehart's work relating to value prioritisation gives a dynamic component to value choice which is especially revealing in respect to giving a shorthand view or perspective on the likely appeal of certain activities and the salience of values.

Clearly, the public value expectation of these value-oriented groups in society could have been significantly distinct. However, one of the popular misconceptions about the Inglehart model is that it is a continuum, with pure type postmaterial at one end and pure type material on the other. However, research reveals that this is not in fact the case as postmaterial values are built upon a foundation of existential security and these security and resource values are fundamental and are not discarded in times of affluence and security, though they may not be prioritised (see Wylie 2000).

Insights from the postmaterial thesis reveal the notion of a sequential hierarchy, starting with satisfaction of the basic, physiological needs and then progressing to the satisfaction of higher order postmaterial values associated with relationships, freedom of expression and actualisation. Individuals value prioritisations begin with their satisfaction of material needs, safety and sufficient resources associated with physiological existence and as they achieve satisfaction in that category of needs or values and progress to the prioritisation and pursuit of higher order values they do not abandon them – when resources are stressed, they revert to those values that represent existential needs – the being values.

The following diagram provides a visual comparison between Inglehart' Alderfer and Maslow's theories. All derive from the same conceptual wellspring and all can be seen as covering the same ground. All three bodies of work suggest that the human value system is dynamic with a direction and an inherent order of prioritisation. The horizontal lines connecting the theories in the diagram below highlight the overlap between the categorisations of the value and needs models. For example, the Maslovian 'safety' and 'physiological' needs equate with Inglehart's 'material' values.

Figure 2.2: The relationship between three theories representing the gamut of human needs and values at different levels of analysis from the two-category theory of Inglehart (on the left of the above diagram) to the three category approach of Alderfer (on the right) with Maslow's hierarchy of needs theory expressed in its eight category version – upon which they are based) in the centre of the diagram.



The value theories of Inglehart (1971, 1977, 1990) and Alderfer (1969), are based in part upon the original work of Maslow and each theory gives an overview of the full measure of human values from the most fundamental needs through value categories reflecting the social nature of human existence to the 'higher order' values and needs associated with self-expression and self-realisation and engagement and interaction for wider social benefit. Fundamentally all are based upon a foundation of material, existence needs at the most fundamental level with Maslow's 'safety' and 'psychological' needs equating with Inglehart's 'Material' values category and Alderfer's 'Existence' needs category. Each theory gives a sense of the dynamic of progression within the human value set from the foundational basic physiological needs to self and social actualisation (Maslow), 'Postmaterial' values (Inglehart) and 'Growth' needs (Alderfer) at the higher order level. These proven approaches give a shorthand insight into the dynamics of the human values 'universe' of which Inglehart's postmaterialist thesis is particularly insightful in allowing the interpretation of data associated with the influences of societal development, socialisation *in situ* and rising affluence and development.

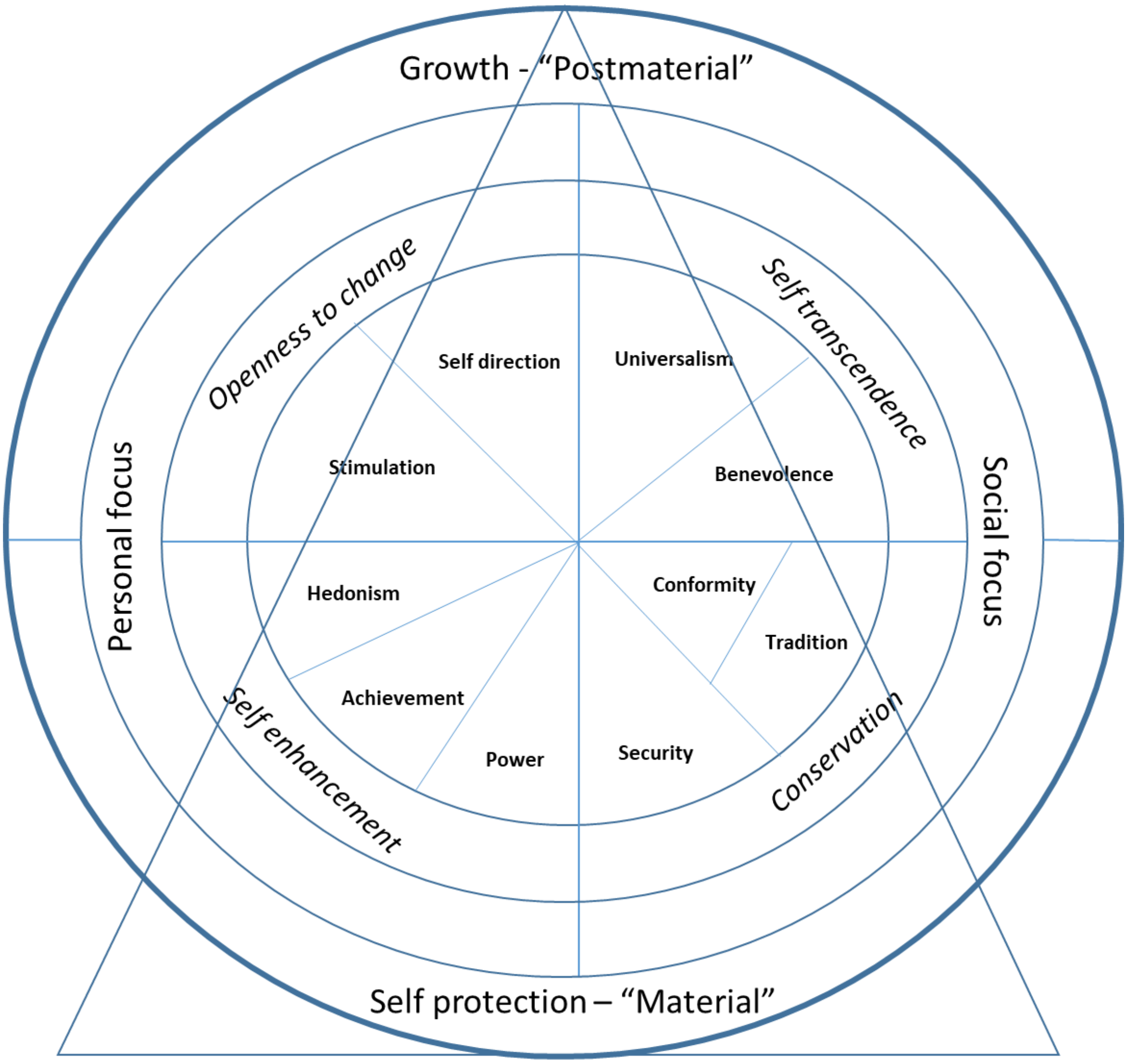
From theory to implementation

These theories of value choice, components and change give us important insights into working with public value. They reveal the relationship between value categories and suggest an upward dynamic of related, progressive value categories. We have seen how the ERG categorisation may be used as a shorthand for the value contribution of an organisation, the ESA examples being particularly instructive here as their outputs and outcomes can be easily categories into *existence*, *relatedness* and *growth* value categories, as we shall see. Perhaps the most significant finding of Maslow's later work, carried forward in Alderfer's and Inglehart's theories, is the transcendental nature of the higher order value orientations, which are associated with the 'benevolence' and 'universalism' value categories in the Schwartz model we used in this empirical analysis and to which we refer earlier.

These three theories, ERG, postmaterialism and the Maslovian hierarchy, are all useful and relevant to an understanding of the public value profile of an organisation. They each allow a heuristic 'shorthand' for understanding and articulating the complexity of value categories. Though these value theories all identify similar categorisations, the key is that at any moment in time, individuals focus, to a greater or lesser extent, upon all value categories though fundamentally, individuals give a greater focus upon material, existence or needs values upon which all other 'higher order' needs-based motivations are built.

In our interpretation of public value profiling, a key issue is in the relationship between value categories and using the Schwartz value circle as an overarching framework which we augment following Wilson (2005) in respect of a relationship between Schwartz and Inglehart's Material-Postmaterial dimensions by overlaying a dynamic which allows for the development of a value narrative in which we present and interpret a value profile in the following sections of this contribution and represented in the following diagram which overlays the Maslovian pyramid onto the Schwartz value circle to represent the notion of value hierarchy and equates Schwartz 'growth' and 'self-protection' summary categories with 'postmaterial' and 'material' categories respectively.

Figure 2.3: Diagram showing Schwartz value circle combined with Inglehart's postmaterial value model



These value categories represent the entire gamut of human values and they are used in the subsequent surveys. The Schwartz value set provides an insight into the foundation of valuation, an ontology for the assessment of perceived value created in the public sphere. Together, they provide a series of categories that reflect how individuals interact with the world and the values that guide individuals in their daily lives and that are grounded in fundamental aspects of human existence.

For the measurement of public value, we draw upon a psychological approach to public value Meynhardt (2009; 2015; Meynhardt and Bartholomes 2011) which we enhance and unpack using two leading approaches (Datler et al 2013) to understanding human values their motivations (Schwartz 1987; 1994; 2012; Inglehart 1977; 1981; 1990; 1997) and the impact of context upon them. To explore the foundation of value associated with this public value investigation in detail we use these proven theories of human values as a fundamental underpinning for the acquisition and interpretation of data revealing public value. In this, the relationship between an organisation and the public sphere in the context of human values is the essential focus of investigation, as Meynhardt argues (2009, cited in Meynhardt and Bartolomes 2011).

The approach we have developed through this project into how the public perceive value in a policy, project or programme, is based on a synthesis of extant, proven theories, models and approaches in public value management and human values and valuations. A comprehensive public value management approach (Moore 1995) extends to a framework that incorporates organisational capacity and legitimacy – but this is based upon the fundamentals of values which underpin the public value concept – and the public value profile of an organisation.

From a functional perspective, human values perform two primary functions. Firstly, they are cognitive expressions of needs (Inglehart, Alderfer) and secondly, they guide actions. As Kluckhohn argued *"[a] value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable that influences the selection from available modes, means, and ends of actions".* (1951, page 395 cited in Rohan, 2000 page 257).

'Values' as cognitive constructs, invisible yet influential, are expressions of underlying motives and motivations which individuals use to shape their activities and inform their relations and dialogue with and within society. Values make a difference (Williams, 1968) they give meaning to action, and to attitudes (Rokeach 1973), and underpin the justification for actions or attitudes. Human values may be conceived as desires, as trans-situational goals varying in importance, that serve as guiding principles in people's lives. Relatively enduring (though not immutable) they shape, singly or in combination, individuals' attitudes and behaviour. Invisible yet impactful, values give individuals stability, and predictability, across social settings. Essentially, they are cognitive maps which help us navigate the broad ocean of complexity we encounter in our daily lives and are at the heart of most of the things we do as human beings.

In review, in this chapter we have developed an approach to the assessment and appreciation of public value which we use in creating a public value profile of an organisation, policy or programme. Our approach is based upon an assessment by citizens of their perception of the contribution of value in the public sphere judged against the things that people need and are motivated to pursue, their values, based upon the work of Schwartz and interpreted using the work of Maslow, Inglehart and Alderfer. This approach allows the assessment of a public value profile at a number of levels of analysis (local, national for example) which, as will be shown in the case study gives an organisation a practical insight into their contribution to the public sphere as perceived by society and provides interpretation to frame a considered, controlled strategic management response.

3. Public value management

Rick Wylie

In this chapter we turn to the management of public value and how organisations and policy makers can pursue public value. We firstly consider the individual organisational perspective, drawing upon the work of Mark Moore (1995, 2013). We then turn to the implications, and imperatives, of the pursuit of public value in the reality of today's networked, polycentric policy environment drawing upon the work of Elinor Ostrom (2010, 2011) whose Institutional Analysis and Development (IAD) framework provides an essential insight into complex policy contexts.

After decades of policy shaped by neoliberal ideology foregrounding financial targets which was driven by the commercialisation, competition and contractorisation of the public sector (in which economic efficiency and financial targets were key drivers) there is today a turn to public value. As an emerging paradigm for organisational practice and public administration, a public value approach represents a new 'humanisation' of policy and practice with a focus on engagement, accommodation and inclusivity. As citizens globally are confronted with new categories of issues including climate disruption, declining populations, ozone depletion, energy shortages, population and species decline and extinctions, emerging diseases, and antibiotic resistance – a new view of value is emerging across all sectors, that recognises the impact that organisations and policies have on the wider public sphere and ultimately on the daily lives of ordinary citizens. In a world of conflict and crisis, human value is becoming a fundamental foundation for action and new currency in a global political economy.

We live, it is argued (Beck 1992) in a Risk Society, a world in which environmental problems, created by man, unprecedented in their complexity and their spatial and temporal reach, involving interconnected ecological and social systems. Today, governments are increasingly focusing on wider than economic value in their evaluation policies and the justification of spending, on 'softer' outcomes rather than 'hard' outputs. In the previous chapter we suggested that public value is an inherently inclusive concept in that given the universality of the human value set as described by Schwartz (1987, 2012). The concept of public value focuses on the relationship between an individual and their everyday lives and represents the perceived contribution (by them) of their needs and motivations: in short, their values. Crucially, though humans all share the same set of values in respect of a series of broad categories, the priorities of those categories, or the detail within them may be very diverse, reflecting differences in background and biographies.

Today, organisations are increasingly seen as small compared to the scale of the issues confronting society. That said, in today's globalised world, the influence of an organisation on the public can be very significant and diffuse indeed, and organisations may have a major impact on the public sphere in ways not originally envisaged or appreciated by an organisation. In all sorts of ways organisations and initiatives with which we have no direct contact give value to citizens, and organisations need to appreciate that the *outcomes* of their activities may extend far beyond their *outputs*.

The recognition and response to public value is resulting in new strategic imperatives for organisations. To address pressing issues in policy and practice, administrators look beyond the boundaries of their organisations as they collaborate across sectors and scales to collectively address major policy issues, creating hybrid institutional forms which pursue public value and address the issues confronting society. In these complex settings, public value has significant implications for organisational practice and design and may even be seen as a motivational force or dynamic in policy networks shaping interactions between sectors, scales and levels including the public in new institutional forms. At both individual and Institutional levels, actors need a chart to work with to navigate this ocean of complexity and the aim of this chapter is to give some guidance as to how to work with public value – at the organisational and institutional levels – to achieve this.

As discussed previously, public value is about the delivery of value to members of the public, to citizens, voters and taxpayers. It is about the relationship between an organisation and its wider, social environment and the impact of an organisation, project, policy or programme upon the public affected by it. From a public value standpoint, we ask what the outcome of an organisation's activities in the public sphere is, rather than what are its outputs in the marketplace, or its policies. In this digitised, globalised high-velocity, world of diversity and division, new institutional forms and structures are emerging, that create new political economies in which public value is becoming an important currency. In this new market, that currency ultimately rests upon the perceived contribution of an organisation, or a policy, project or programme to the lives of ordinary citizens, seen through the lens of human needs and motives – that is to say, human values as perceived by ordinary citizens.

Public value and organisations

This public value perspective is a new way of looking at the value of something. It's about the realisation of human values in the public sphere and it represents the democratisation of public policy and projects. As we'll see in the case study section of this book, organisations often don't realise the impact they are having or the value they are creating in the public sphere, that is to say, their public value profile. They often do not appreciate its presence and consequently do not assess it. Increasingly, public value is also becoming important for the organisation itself and a positive public value profile may have a significant impact upon an organisation's mandate and resourcing in increasingly competitive authorising environments.

Often conceived of as being purely for the public manager, public value is now recognised as being produced by all organisations, to a greater or lesser extent. Moreover, as realisation dawns on organisations that a positive public value profile has positive implication for the mandate or 'licence to operate' of an organisation in its authorising environment and that this in turn can have positive resources implications for an organisation, public value is moving from the domain of rhetoric into becoming an organisational imperative.

A public value approach to policy and practice expands the boundaries of an organisation into the wider public sphere re-scaling the organisation. It also gives a more rounded view of citizens as individual human beings rather than as merely consumers of services. Organisations in public, private and social sectors are increasingly realising the contribution they make, sometimes unintended and often indirectly, to the lives of ordinary citizens as a consequence of their activities which, sometimes unintended and more often than not unappreciated and unmeasured, may be seen as positive externalities deriving from their outcomes. Now, more than ever before, the public are being brought into the policy process which is becoming a hybrid sector embracing public, private and social sectors, and the public itself, and this value is a key part of the portfolio of an organisation's 'worth' and for an organisation, creates strategic opportunities to make a difference to society and the lives of individual citizens, sometimes on a massive scale.

Turning to the 'public' element of public value reveals the breadth of the concept. Following Ostrom et. al. (1961) the 'public' may be envisaged as those who are touched by the indirect, positive, consequences of an organisation's outputs. Today, the public sphere may, in this era of globalisation and the word-wide-web be very broad indeed with the public impact of an organisation extending well beyond what would be considered its domain. Moreover, addressing grand issues like climate change, or Covid-19, give a wider perspective to an organisation's policies and practices.

Thinking of organisational implications for the 'public', a public value perspective brings into view the boundary issue of an organisation. There are two elements to this. Firstly, the complex issues public policy and projects seek to address can result in collaborations between organisations and sometimes across sectors and geography; and secondly the engagement of citizens, communities and collaborators in the co-production and co-design of public facing outcomes.

By adopting a strategic approach to public value management, the outcomes of an organisation in the public sphere may be seen as an important asset for an organisation within its policy environment – it may even shape the mission and goals of an organisation as it comes to re-imagine itself as a 'public value organisation'. Such an appreciation will also take into account the quality of relationships and processes, including citizens and their representatives, as actors in 'new institutional' structures looking at public value outcomes in which public value comes to be a motivational dynamic – as well as money. As Stoker (2006) argues "Building successful relationships is the key to networked governance and the core objective of the management needed to support it" (2006). These structures are increasingly complex both in terms of their processes and outcomes and it may be that a common approach to evaluation based upon their outcomes in the public sphere would provide an acceptable measurement of value. Indeed, with one of the challenges recognised in institutional theory being reliable observation and assessment of new institutional performance (Basurto et al 2010), a public value approach provides a reliable and increasingly recognised framework measure of the effectiveness of institutional structures.

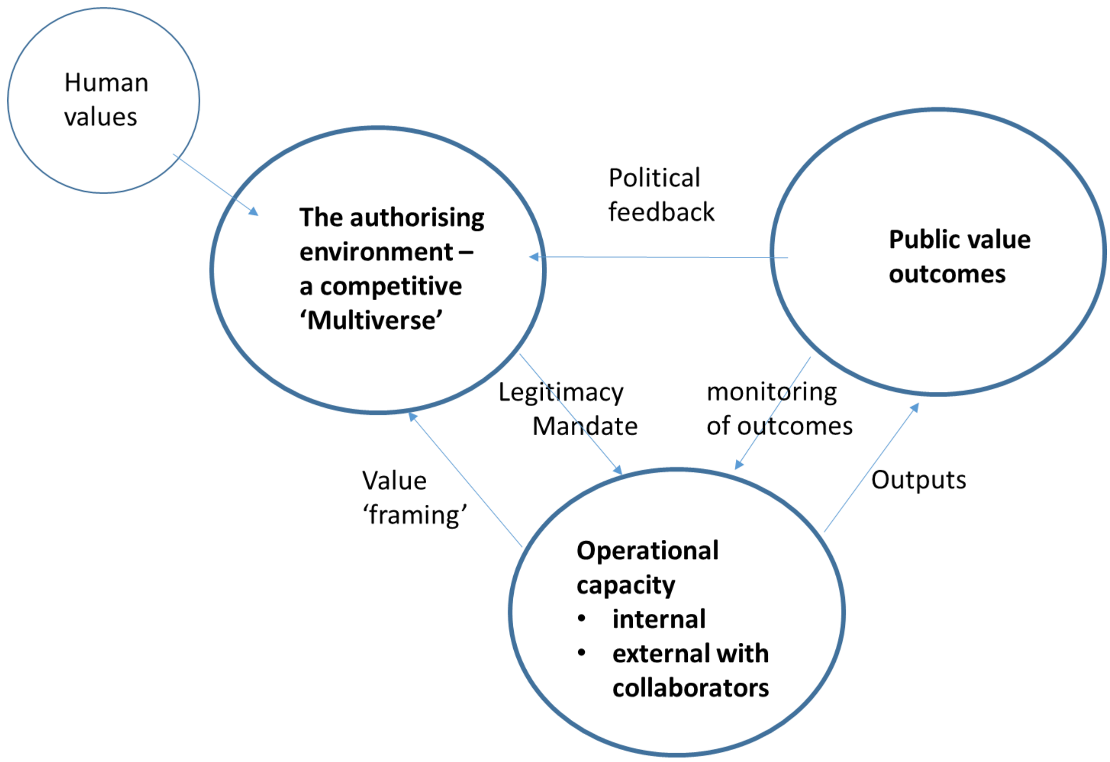
In his seminal book *'Creating Public Value'* (1995), Mark Moore draws attention to the importance of the role of public managers as, what might be termed 'impresarios', orchestrating the process of public policy in partnership with other actors and stakeholders "…in ways which try to ensure that good choices are made in the public interest, and which legitimate, animate, and guide the subsequent implementation, in order to improve outcomes for the public" (1995). For Moore, the role of the public administrator is key to the recognition and realisation of public value and is central to the internal strategic management process described below.

Following Moore, these three elements form an overarching strategic management approach for achieving public value. Each of these three elements must be pursued to achieve and optimise a public value contribution. Firstly, the organisation must be aware of and must create something publicly valuable; secondly, it must be legitimate and sustainable politically; and thirdly, it must be achievable within the capacity and capability of the organisation and its collaborators. Moore's framework allows managers to work with public value in a structured way. It begins to provide a set of concepts that are valid in and applicable across any organisation or policy context. Moore's elements may be positioned in a real-world and practical way for an organisation in its environment and through the organisation's work with stakeholders and society to optimise their public value outcomes.

Moore's strategic triangle is represented below, with some modifications based upon our discussion, in particular, the positioning of human values as an element of the model. As Kettl (2002) argues, "Public managers need to rely on interpersonal and interorganizational processes as complements to – and sometimes as substitutes for – authority". A key element of this dialogue is in the pursuit of information about values. As Moore argues…

"Public managers create public value. The problem is that they cannot know for sure what that is… It is not enough to say that public managers create results that are valued; they must be able to show that the results obtained are worth the cost of private consumption and unrestrained liberty forgone in producing the desirable results. Only then can we be sure that some public value has been created." (1995).

Figure 3.1: Modified 'strategic triangle' of public value management (adapted from Moore 1995) highlighting the 'double dynamic' relationship between the organisation and its authorising environment and political feedback as a result of effective public value outcomes.



Moore's framework model has been modified slightly in the above rendering in order to accommodate more explicitly the relationship between an organisation and its public value profile, and the double dynamic of the outputs and outcomes associated with its outputs in respect of their public value outcomes. It shows the essentially two-way dynamic between capacity and authorisation represented on the diagram above by two arrows that reveal the insight from Davis and West (2009) about the dynamics of managing for public value and the importance of the authorising environment seen as a multiverse of competing possibilities.

Appropriately termed a 'multiverse' (Davis and West 2009) the authorising environment may be envisaged as a theatre or public arena in which policy propositions compete for resources. Here, the policy actors *"… bring propositions on policies and services to a wider public arena or theatre in the form of policy frames".* Drawing upon the Davis and West model, we see organisations as policy entrepreneurs engaging wider value related outcomes which they must package credibly with their proposals for mandate renewal if they are to be successful. They note…*"A values regime must be able to generate coherent frames, if it is to communicate and argue its case in the authorization environment. It must also be able to prepare public servants for the multiple accountabilities—and collision of values—that they will face in this multiverse."* (2009).

In this increasingly resource-limited and competitive environment in which private and social sector organisations as well as other public sector organisations may be competing for the same resources, this is a critical element of strategic management. The model above has been modified to accommodate this two-way flow between the organisation and its multiverse, one way with a value framed proposition, the other showing the mandate and resourcing awarded if the former were successful. Essentially, an organisation must compete against other propositions from competitor organisations in the same and other policy arenas, forging both an institutional and policy 'identity' for its propositions as it competes for public attention and political support.

If the authorising environment may be characterised by competition, it may be that the organisational capacity element of Moore's diagram should be characterised by collaboration. In this polycentric, complex world in which organisations confront large scale issues with relatively limited capacities, collaboration and coordination in new institutional arrangements become increasingly the norm. In the above diagram we have unpacked the operational capacity section of Moore's model to include internal and external elements as organisations work within new structures characterised as 'networked governance' in which organisations are embedded in systems of dialogue and exchange (Stoker 2006) and in which the public have a more important role – a process which itself can provide public value. Within this new dynamic, the organisation's boundaries become increasingly blurred as it achieves its mission through collaborations, probably involving a range of partners across different issue areas. And from a public value standpoint these individuals may have different value priorities and evaluations

Moore's approach describes strategic management imperatives from the perspective of the individual organisation. In the above discussion we have explicitly extended the operational capacity into the external environment of an organisation, reflecting the organisational reality of hybrid, networked and collaborative institutional forms. Today, the management of networks and collaborative relationships is a key part of the administrative process. From a policy perspective this opens out the political aspects of organisational and stakeholder collaborations broadening out of the political realm and well beyond party politics, and legitimising inputs that go into the policy process from a diverse range of actors possessing a plurality of value perspectives and priorities.

Public value and public policy

The increasing importance of engagement and dialogue between organisations and stakeholders is creating a complex environment of collaborative governance in which *"…the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished."* (Emerson et al 2011).

The reality of policy making in contemporary society is that actors in all sectors are engaged in complex, collaborative processes of deliberation and implementation in which a wide range of actors are seen as legitimate members of the decision and policy processes (Stoker 2006). As a consequence, complex institutional forms are emerging to accommodate a diversity and plurality of perspectives in dynamic and fluid socio-political arrangements.

The ability of these new policy structures to accommodate diversity and a plurality of perspectives and values is an important aspect of public value management in a heterogeneous value environment (Ansell and Gash 2008). Mutual understanding specifically refers to the ability to understand and respect others' positions and interests even when one might not agree (Emerson net al 2011). Key to public value management at the institutional level therefore is a public sector that is actively engaged in the public sphere and that actively seeks out dialogue with citizens and stakeholders. These public institutions with the capacity to identify, build and maintain networks with relevant civil society actors must work in collaboration, rather than competition, with both citizens and/or non-state service providers. This is the essence of public value management (Shaw 2013).

In this respect the potential of a public value perspective to accommodate a plurality of value positions and perspectives is important. In networked governance as Bardach *argues "…substantial public value is being lost to insufficient collaboration" because political pluralism tends to create institutional and political pressures that "push for differentiation rather than integration [where] the basis for differentiation is typically political rather than technical"* (1998). With a public value perspective embracing and respecting the entire constellation of human values it provides an approach to the creation of new governance structures based upon inclusivity and dialogue.

In these settings, managers increasingly have a role steering these inclusive processes of deliberation and co-delivery (Stoker 2006) and a public value management paradigm provides a broad conceptual map for situating and exploring components of cross-boundary governance systems. Ranging from policy- or programme-based intergovernmental cooperation to place-based regional collaboration with nongovernmental stakeholders to public-private partnerships, these new institutional environments may be characterised as hybrid, heterogeneous and institutionally diverse (Aligicia and Tarko, 2013) creating new network forms which "…challenge our institutional imagination to go beyond existing theories in either political science or economics.". In these new structures the political and public sphere are opened out in a wider political process in which public, private and social sector actors are engaged in the design and delivery of outputs and the realisation of outcomes.

One of the fundamental issues in governance is how to cope with a plurality of individual positions and how to accommodate the plurality and diversity of values and value priorities emerging in wider processes of dialogue and debate. In other words, to work with a diversity of individuals and their value priorities in the public sphere. Managing the system's capacity to cope with this is a key challenge for administrators as well as the conversion of heterogeneous private value priorities into an overarching framework for public value (Aligicia and Tarko, 2013).

An institutional design for public value management, as conceived here, is likely to possess certain of the characteristics of a boundary organization; principally, the capacity to reach out to and collaborate with multiple policy actors in the co-production of value (Shaw 2013). In these new institutional forms, citizens' preferences are not fixed or exogenously determined rather, they are fluid, contextualized and recognised through constant processes of deliberation, dialogue and interaction. What is sought as an institutional management ‘paradigm’ for public value is a public sector/civil society nexus of interactions recognising the polycentric nature of the policy network and the plurality of value positions, but based on a common ‘language’ of human value and on the creation of settings within which values can be recognised and respected. To this end, we turn to Ostrom’s Institutional Analysis and Development (IAD) Framework (2006, 2010) which may point the way towards an appreciation and accommodation of this diversity.

The use of a framework approach follows Ostrom who described a framework as “…a multi-tier conceptual map’ which gives a level approach to organise sets of variables which impact upon policy outcomes. The IAD framework is intended *“…to contain the most general set of variables that an institutional analyst may want to use to examine a diversity of institutional settings including human interactions within markets, private firms, families, community organizations, legislatures, and government agencies. It provides a metatheoretical language to enable scholars to discuss any particular theory or to compare theories.”* (Ostrom 2010).

Regarded as one of the most distinguished, insightful and tested frameworks in the field of policy sciences (Clement 2010; Carlsson 2000; Gibson et al 2005; Imperial 1999; Rudd 2004), the IAD framework maps the diverse, complex and polycentric nature of organisational environments with multiple actors and relations. It also recognises the key role public value may have in legitimising an organisation and in helping to secure its mandate and resourcing. Focusing upon public value as a key outcome, and working with collaborators, our application of the IAD framework provides practitioners and policy makers with a conceptual map of the relationship between the elements of an organisational policy environment in the realisation of public value.

For the purposes of this study of public value and the engagement of ordinary citizens, and their needs and interests in the policy process, perhaps the key thing about IAD is that it is a framework, defined as “*identifies, categorises and organises those factors deemed most relevant to understanding some phenomena”* (McGinnis 2011). IAD allows us to bring wider theorisations to bear upon the institutional process and in this study, we draw upon human value, needs and valuation theories within the IAD framework as a wider view of an institution in complex institutional settings.

IAD links theory and practice, analysis and policy (Aligica 2006) and foregrounds the actor (individual or institution) within a wider relational setting. It also relates actors and structures to the settings in which institutional and intergovernmental relations and policy outcomes take place (Kingdon 1991). One of the most useful elements of the IAD approach is its multi-level structure that takes into account constitutional, policy and operational levels in which broadly similar governance processes exist at different levels in which the same categories of external conditions (administrative, biophysical and community) bear upon the actors at that level.

For our purposes in this study, and consistent with the definition of a framework, we use IAD as an organising device to give some structure and conceptual grip on the factors and processes that bear upon the public value profile of an organisation, and its use. The IAD framework gives us a grammar for institutional analysis and it has been used flexibly by a number of researchers, including:

- The governance of space colonies (Wylie 2014)
- Institutional arrangements in the Australian outback (Smajgl, Leitch and Lynam 2009
- The evolution of the environmental behaviour of large-scale soybean producers in Mato Grasso, Brazil (Delaroche 2019)
- Soil and Water Conservation Activities in North-Western Ethiopia. (Abele et al 2018)
- Afforestation and forestry land allocation in Nothern Vietnam (Clement and Amezaga 2009).
- Residential Public Open Space Governance (Teck et al 2014)

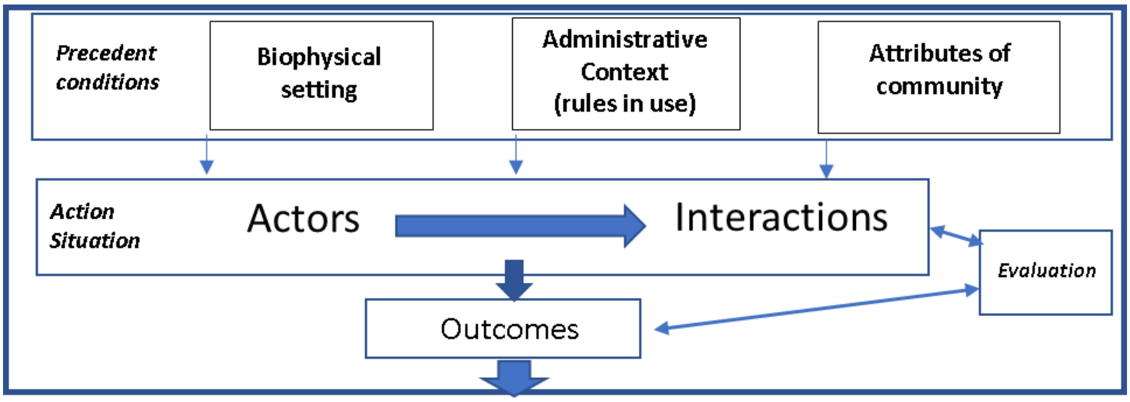
Perhaps the first thing to say at this point is that, though IAD was never developed to study public value, there has been seen to be a strong connection between the two ideas. As Aligica and Tarko (2013) argue, in a polycentric policy environment, public value is the key to the IAD system. Especially relevant to the networked forms of institutional architectures which are the stuff of public value world (Bryson et al), IAD is very revealing in that it foregrounds the role of the actor within institutional structures in the networks of collaboration and co-production discussed previously.

From the standpoint of public value, the IAD framework accommodates a diverse set of actors and actions reflecting, and respecting a plurality of value priorities, within an overarching framework for appreciating and acting to achieve public value. In a world characterised by a constellation of value priorities, the IAD framework gives a perspective which allows us to recognise and respect a plurality of value positions and gives a dialogic structure in which they can be articulated, appreciated and accommodated. For the purposes of institutional collaborative structures for public value management, an IAD-informed perspective provides an essential insight into collaborative organisational relations and the impact of constraints upon those organisations as they seek to pursue the public value agenda set out by Moore (1995, 2013) with its dynamics of capacity, legitimacy and delivery.

The IAD framework conceptualises a situation according to initial conditions, the definition of the action arena, patterns of interaction with their outcomes and existing evaluation criteria. The core is the action situation which may be envisaged as *"…a nexus in which a group of decision makers jointly confront important decisions related to some policy concerns."* (Cole, Epstein and McGinnis 2019 page 247). The framework regards actors in every action arena as being constrained by a number of 'precedent conditions' broadly categorised to be biophysical setting, attributes of the community bearing upon the action situation and the administrative context or 'rules in use'. In the rendering below (adapted from Ostrom 2011) we locate the elements of the IAD framework taking one level of analysis (we'll look at a nested set of action situations later) and following Ostrom (2011) we see them embedded in their administrative (rules), biophysical and community contexts.

Of particular relevance to a discussion of public value is that IAD envisages actions as a consequence of the attributes of an individual actor (values) and the attributes of the decision or action situation in which they are located within complex interactions perhaps shaped by public engagement and the pursuit of public value, and with an evaluation by individuals of the process as well as the actual outcomes. Throughout its structure, the IAD framework is grounded in 'methodological individualism' – a presumption that institutions are best understood as being constructed by individual humans acting singly or severally (McGuinness 2011). Though it was never envisaged as a public value framework the structure of elements of this approach allows us to take values into account at a given level of analysis at the input, process and outcome stages.

Figure 3.2: Diagram showing the IAD process at an operational level showing the precedent conditions which bear upon an action situation comprising the actors and their interactions, with resulting outcomes and the evaluation process assessing both outcomes and process.



The core of IAD is the action situation, a setting where actors meet establishing patterns of interaction that generate outcomes for those actors, as well as social and ecological effects. The action situation is an analytic concept that enables an analyst to isolate the immediate structure affecting a process of interest to the analyst for the purpose of investigation. A focal action situation comprises actors whose interests and interactions are shaped by a range of external variables, it is the place actors interact and upon which the external environment bears in the form of the physical environment, the community setting within which they are located and the 'rules in use' which shape their interactions. With these variables in play the IAD framework provides flexibility in its application and the basis of a universal institutional structure.

The action situation is where contextual influences are brought to bear on the key participants whose interactions shape policy outcomes (McGinnis 2011). An actor enters an action situation with their own position (citizen, policy maker, salesman, politician service provides, etc), strategy (as collaborator, rent-seeker, service user, funder etc), and behaviour all of which are to some extent shaped by what is termed precedent conditions including the physical state of the world and existing biophysical conditions, the attributes of the community in which they are located, and the administrative context or "rules-in-use."

The precedent conditions define the context in which actors interact in institutional arrangements that shape their collective decisions and individual actions. Regardless of how resource policies at the regional, national, or international levels might change, the ultimate effects are filtered through the local context (Andersson 2006). The broadest categories of precedent conditions affecting an action situation at a particular level include:

- Biophysical setting, the physical world in which we inhabit.
- Attributes of a community, which may include the history of prior interactions, internal homogeneity or heterogeneity of key attributes, and the knowledge and social capital of those who may participate or be affected by others.
- Rules-in-use, which specify common understanding of those involved related to who must, must not, or may take which actions affecting others subject to sanctions which may evolve over time as those involved as actors in one action situation interact with others in a variety of settings.

The IAD framework has been developed to enable the analysis of 'institutional settings' – that is, any situations that involve people interacting together in a certain context and following certain rules. An institution is essentially a set of rules actually used by a set of actors to shape and constrain interactions. They are *"…human-constructed constraints or opportunities within which individual choices take place and which shape the consequences of their choices..."* (McGinnis 2011 page 170). The IAD framework describes an institutional structure at the heart of which is the 'action situation' which may be taken as *",,,an abstraction of decision environments in which individuals and corporate actors interact with one another, making choices that jointly determine outcomes of some aspects of a policy question."*

In these action situations the influences upon individual actors (individual and institutional) are key to understanding the interactions. As Cole et al argue… *"…Individual choices and collective outcomes are influenced by the beliefs [and therefore values as a form of belief, upon which individuals act by preference] and incentives of the relevant individuals, as shaped by the responsibilities and social expectations attached to official positions they may hold, and by the information available to them." (2019 page 246)*

The Ostromian concept of an institution may be flexibly applied as it does not only encompass written legal documents but also includes informal rules which may have been only orally agreed upon (Clement and Amezaga 2009). Originally designed to unpack the complexity of polycentric, network institutional environments and to assess how interactions in policy communities and networks are shaped and constrained by 'exogenous variables' – such as public value, from a public value standpoint, IAD provides an analytical structure for analysing and developing public value governance arrangements at a range of levels and scales.

From a public value standpoint, and reflecting the complex, multi-level world in which organisations and actors exist, the action situation can be unpacked and represented in the following way, foregrounding the role of values in the context of an action situation. These allow us to envisage and appreciate the factors bearing upon interactions and to the role of values in bestowing legitimacy, mandates and ultimately resources in the authorising environment of an organisation. Though the IAD framework does not explicitly deal with values in the Action situation – the focal unit for the understanding of collective action (Carter et al 2016) human and organisational values are embedded throughout the framework in assumptions about the actors in the action situation, potentially in the framing rule in use and in the evaluations of the outputs and the process itself.

In complex governance settings, the list of potential participants may be long. Actors occupy 'positions' within the action situation specified in the rules in use adopted or imposed upon the members. These positions are the connecting link between participants and actions, and they are seen as 'slots' into which participants move and positions may include members reflecting the hybridity of sectors and the constellation of interests involved in the institution. In an 'organised' action situation, a specific position may be given a mandate to take specific actions defining the status or role of an actor in that situation.

The concept of evaluation within the framework focuses on assessing the outcomes of the action situation. As Ostrom argues *"in addition to predicting outcomes, the institutional analyst may evaluate the outcomes that are being achieved as well as the likely set of outcomes that could be achieved under alternative institutional arrangements."* (2011 page 15) Especially relevant for the purposes of public value insight she goes on… "*Evaluative criteria are applied to both the outcomes and the process of achieving outcomes."* (Ostrom 201, page 15). Acknowledging that many criteria may be used for evaluation "…conformance to values of local actors" is given as one of a number of evaluative criteria (page 16). A public value approach grounded in human values adds a wider and more comprehensive perspective on value and a more theorised and embedded foundation for their analysis. This allows us to focus upon the outcome of the process but also, as well as the outcome, the actual relational quality of the interactions as perceived by wider publics within the networked governance architectures within which governance is enacted. In the context of these wider governance structures, especially those involving the public, broader groups of participants may be involved in the policy process, and these inputs, and the opportunity to provide them, could themselves provide significant public value.

With its fundamental basis upon the individual actor and human perceptions and processes IAD can provide insights for the analysis and development of relational, institutional structures by appreciating that institutional structures are constructed and operated by individual humans (McGinnis 2013) within which individual actors use cognitive shortcuts in their processing of information and decision-making such as motivations, needs and values. IAD makes key definitional assumptions about the individual actor that are revealing from a public value perspective. These are:

- the resources that an actor brings to a situation;
- the valuation actors assign to states of the world and to actions;

- the way actors acquire, process, retain, and use knowledge contingencies and information; and
- the processes actors use for selection of particular courses of action.

From a public value standpoint, the role of values in shaping actors' decisional processes is especially significant. With an organisational focus upon public value, it could be that the organisation will have a position and priority on achieving public value as an actor in the action situation. In addition, members of the public could be actors in the same setting, perhaps in co-production arrangements bringing their needs, motivations and values to bear through their interactions. With its inclusion of values and human valuation the IAD approach accommodates the subjective nature of human valuation and, by implication, multiple perspectives and views describing and evaluating policy issues, outcomes and wider states of affairs.

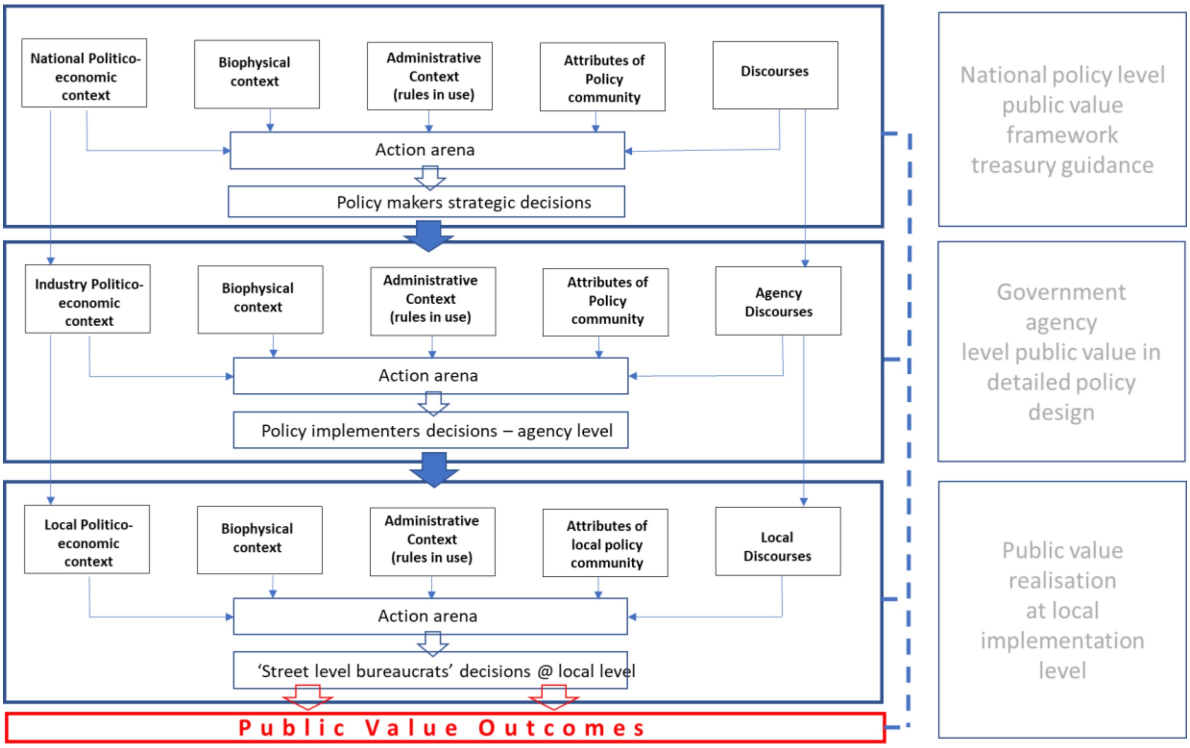
Values and public value evaluations and aspirations are also brought to bear upon the action situation through inclusion of the concept of 'community' "…*to encompass all relevant aspects of the social and cultural context within which an action situation is located.*" and which "…*embraces relevant aspects of the social and cultural context within which an action situation is located* (McGinnis 2011 page 175). From a public value governance standpoint therefore the IAD concept is very accommodating, encompassing multiple level perspectives, shared values and goals among member of a community within its framework. It gives an insight into institutional structures which reflects the reality of today's complex, polycentric policy environment in which a plurality of organisations from a diversity of sectors and settings collaborate to address complex issues in networks of deliberation and delivery These dialogic structures are a key aspect of the emerging 'New public governance' paradigm (Stoker 2006).

A key feature of contemporary policy making is its multi-layered structure, which extends from the operational level, where decisions directly affect resource access and use, to the collective-choice level, where the rules that govern resource access and use are designed, to the constitutional level, where decisions affect the rules that govern how decisions are taken at the collective-choice level (Clement 2009).

An important contribution of IAD to the diagnosis and development of public value management in complex policy settings is its ultimate, multi-level form in which one can envisage the world populated by adjacent action situations with actors participating in many of these interconnected institutional arrangements. Ultimately, one could envisage an almost fractal-like arrangement in which self-similarity of structure becomes evident as one unpacks a policy network or what McGinnis (2011) refers to as 'networks of adjacent action situations' (NAAS) through which action situations are seen as complex and should not be seen in isolation from others (Cole et al 2019). The diagram below renders a three-level structure embracing policy, agency and operational levels. The Ostrom framework is often presented in this way, with constitutional, policy and operational levels setting rules which bear upon subordinate levels.

One of the key aspects of IAD from a public value standpoint is that an action situation, as a focus of understanding for an organisation, problem or policy relationship, does not exist in isolation. In the complexity of polycentric governance architectures, other action situations will relate to it and may indeed even bear upon it. In the diagram below showing multiple interconnected levels of analysis of action situations at the policy level, then the (let's say government) agency levels, all of which bear upon the implementation decision level in public and community settings. The outputs of the policy and agency levels would be rules in use shaping the membership, interactions and dynamics Following Cole at al. (2019) we would include evaluative criteria as also coming from adjacent action situations and bearing upon the dynamics of a focal, subordinate level action situation as shown in the diagram below.

Figure 3.3: Representation of action situations at multiple levels and interactions between them (after Clement 2009, 2010).



Using an IAD framework-based approach (following Ostrom 2006) in its multi-level form (see Clement 2009, 2010) gives an important insight into public value management at different levels of analysis. In the above diagram, we see three levels representing the national level, making constitutional level decisions, agency level, making policy decisions and the lower level of policy implementation at the grassroots level, probably involving actors involved in the delivery and receipt of services at the community level where public value is realised as outcomes directly impacting upon people's lives.

An IAD approach to public value management gives a flexible multi-level framework in which relationships between levels can be appreciated and accommodated. Consistent with the principles of ‘New Localism’ (Stoker 2007), IAD may be applied at a variety of connected levels of analysis relating community-level interactions with public policy and constitutional levels but with an emphasis placed upon interactions at the level of individuals living their daily lives.

IAD incorporates key elements of organisational networks in the authorising environment of individual actors from which an organisation and the institutional structure itself achieve a mandate. It also accommodates the plurality of actors involved in policy and service provision through the concept of the action situation and interactions between organisations, stakeholders and citizens. Finally, it accommodates accountability through a values-based evaluation and an evaluation of the interactive process itself by stakeholders in which we see a nested set of action situations and related institutional and environmental influences.

Consistent with a wider public value approach IAD makes no recommendation of a standard design or architecture for institutional collaborations. Rather, the way we have applied it in this context is that it connects an individual organisation (which may be envisaged using Moore’s strategic triangle) with elements of institutional interactions. Reflecting the reality of polycentric network and collaborative structures the IAD gives an insight into the constraints placed upon actors and organisations in their networking and collaborative activities as they collectively address complex issues. One of the key questions facing collaborators is to assess whether collaborations have been useful in delivering value to society and the IAD framework gives us an insight into that. We have discussed how rules and evaluative criteria could be formed and driven through the levels of nested sets of action situations and fed into the governance architecture created in multi-level policy settings.

Earlier we suggested that a public value dynamic could create a centripetal dynamic within collaborative policy networks by establishing a focal issue of interest to all collaborators yet accommodating different value positions and perspectives among stakeholders. This facility of creating an institutional structure to recognise and respond to diversity can address one of the issues of the centrifugal nature of policy collaboration discouraging actors exhibiting strategic behaviour.

In respect of the issue of transaction costs associated with network collaborations, which can be high, it may be that a public value approach or perspective could accommodate multiple policy and issue positions and interpretations simplifying the complexity of collaboration and communication between actors, especially if mandated from a higher policy level. At a local level this may be especially true, with stakeholders engaged in the design and delivery of policy solutions engaging in collaborations at local levels directly impacting upon individuals’ daily lives and settings.

From a public value management perspective, a key role for policy makers could be to set the signals, rules and evaluative criteria, from constitutional and policy levels, in order that public value is appreciated and pursued at the operational levels. Here, the role of the locality is of vital importance as it is where the public are actually engaged in policy implementation and service delivery. Today, with increasing calls for a new localism in the context of a nested role within national and wider policy in a complex, globalised world in which all tiers of government and other sectors are brought to bear at local levels a public value approach could add traction to policy at the local level where public value is realised, at the most accessible level of governance for citizens (Stoker 2007).

As Stoker opines, the so-called 'New localism' which *"represents a practical response to a significant practical challenge: how to manage a substantial variety of state service provision and interventions in a world that defies the application of simple rule-driven solutions and where the recipient of the service has to be actively engaged if the intervention is going to work."* (2007 page 2). One of the themes of New localism is complexity in that the governance processes themselves are complex and operate at multiple levels, where the challenges are as much in the realm of 'soft wiring society', with healthier communities, education for all children (and adults) and individuals living their lives sustainably and in an environment of security and inclusivity.

In this complex environment central government could be a standard setter for citizen engagement in the decision-making process and in the evaluation of the performance of policy design and implementation. This requires the engagement and commitment of capital. Evidence from many studies confirms that where people feel a sense of togetherness or shared commitment, they are more willing to participate in decision-making, and people's positive psychological disposition towards the object of participation can make a difference (Stoker 2007). Here, a public value approach clearly has a role in that it is inherently dialogic and inclusive, especially at the implementation level where communities and citizens can be engaged in co-creation networks in what has been termed structures of networked community governance with its ultimate aim of achieving public value (Stoker 2007 citing Moore 1995).

Achieving public value at the community level in the context of complex systems of multi-level governance with competing interests and agendas it may be that public value has a role in unifying hybrid, polycentric policy networks. In an environment of complexity and fluidity as organisations interact, compete and position themselves in hybrid action situations a public value perspective comes to have a wider significance in an environment of diversity. For the manager working in these settings, public value may be a way of handling complexity and diversity in polycentric action situations in which a plurality of value positions may need to be accommodated. In such complex fields, a challenge is how to accommodate and work with diversity – a condition which increasingly defines the contemporary realm of public affairs (Aligica and Tarko 2013) and in which a public value perspective and narrative comes to have an important role in accommodating diverse value positions in creating and sustaining an acceptable states of affairs in complex policy environments.

A strength of a public value approach in the context of IAD is in its ability to incorporate the gamut of human values covering the total constellation of need and motivational categories. Within its framework approach, IAD maps multiple 'actor-positions' across multi-level 'action situations'. These structures create space in policy settings necessary for the articulation and accommodation of a diversity of value positions and perspectives allowing the appreciation, articulation and accommodation of diverse value positions.

The IAD framework, with its multi-level, nested structure, provides a structure for interactions to identify and accommodate value positions through dialogue and provides an architecture for policy makers to facilitate the accommodation of a range of value positions. For public managers and policy makers the IAD framework's levels approach suggests how dialogic spaces – 'action situations' can be framed by rules set out at superordinate constitutional and policy levels.

In the UK, the Treasury's Public Value Framework (2019) is an example of a structure for public value which could be a step in the right direction to provide framing and rule-setting for subordinate action situations to create an appreciation of public value positions and perspectives and appreciation of this diversity and an accommodation through dialogue towards an institutional design based upon *"…an ongoing collective process of adjustment, inquiry, negotiation discovery, learning and co-ordination"* (Aligica and Tarko 2013 page 740). Polycentricity in the policy environment has been regarded as a problem, with the accommodation of the agendas and activities of a range of diverse actors being regarded as requiring significant effort to navigate. However, using the IAD framework as a lens we see how polycentricity can be navigated and how, within certain limits, a polycentric policy environment can accommodate a plurality of value positions.

Conclusion

As organisations come to appreciate the importance of public value as an outcome of their activities for society, and as a currency in the political economies of their authorising environment, policymakers and professionals in all sectors are coming to take a wider view of their activities and to appreciate the impact of the softer outcomes of their activities, as well as the hard outputs.

In this chapter we have discussed the management of public value processes and outcomes for an organisation highlighting the importance of a perspective beyond the boundaries of an organisation or policy. As organisations confront big issues like climate change, global poverty and Covid-19 (to name but three) in hybrid, collaborative networks they come to think beyond the boundaries of their organisations, beyond the sectors they are traditionally located in, and to work within hybrid, cross-sectoral, polycentric networks.

Drawing upon the work of Mark Moore, we discussed the role of human values in the assessment and processes aimed at achieving public value at an organisational level and noted the double dialogue that organisations must engage in as they produce – and recognise – public value outcomes that are associated with their outputs. Increasingly, public value is becoming a key element of the performance of an organisation in its authorising environment in multiverses of competing resource and authority claims in which the public value credentials of an organisation determine its mandate and support. Now, more than ever before, organisations focus upon their contribution to the public sphere as much as financial efficiency and ask the question ‘Are we doing the right things?’ rather than ‘Are we doing things right?’.

A common denominator within institutional and issue diversity is public value, defined here as the relationship between the outcomes of an organisation or policy in respect of its fit with human needs, motivations and values as perceived by citizens as they go about their daily lives.

Public value represents a new way of assessing and articulating the value of an organisation, suggesting new priorities, practices and processes which engage and reflect the values and interests of ordinary citizens, who may be nominally unrelated to the organisation in a commercial or resource sense. It is a wider view of an organisation, grounded in a sense of purpose and an approach to process beyond the organisation’s boundaries which requires organisations to operate a number of scales and across a range of settings.

This is what has been termed a polycentric system, where there are multiple centres of authority and influence and sometimes-diverse constellations of positions and perspectives on complex issues. Polycentricity is the key characteristic of the current policy environment as increasingly technical and often politically charged solutions need to be developed in hybrid ‘action situations’ in which actors from many sectors and specialisms and from across different scales collaborate to address big issues. The implications of issue complexity and polycentricity are further compounded by the diverse range of values and value priorities which may be invoked by and brought to bear upon these complex issues.

For the public sector manager, an appreciation of the institutional relationships they encounter and work with and within is an important aspect of public value management. This inter-organisational activity is a necessary response to the polycentric nature of policy and the hybrid nature of institutional forms which span sectors, specialisms and scales. To address this complexity, we propose an approach based upon Ostrom’s IAD framework which provides a framework that can be used to analyse and create institutional collaborations. With the reality of policy and public administration turning increasingly towards multiple levels, a modified IAD framework which includes a public value imperative in respect of rules and evaluations provides a fresh approach to implementing public value solutions within complex institutional processes. Within hybrid policy networks, public value can, it is argued, create a narrative which bestows influence and legitimacy on actors through their articulating and achieving a public value focus.

For the public sector manager, the engagement of a plurality and diversity of people with different value priorities and perspectives can create tension and a centripetal dynamic in policy and institutional structures. A public value approach, in concert with insights from the IAD framework, can create a framework to accommodate value heterogeneity in the context of polycentricity. Through public value’s grounding in the universal human value set, and the positioning of policies, practices and processes within that universality, a public value approach could create institutional structures within which the awareness, appreciation and accommodation of different value positions is perceived and presented as being viewed and valued from a broad range of normative perspectives.

4. Public value and inclusive citizenship

Stephen Haraldsen

Introduction

This chapter turns to the role of the public in public value management and specifically, the role of the citizen in the public sphere. The public space provides an arena for dialogue that is essential to the determination of what the public value. In this chapter I argue that public value requires an active and inclusive citizenship, and that a focus on public value can strengthen inclusive citizenship in a virtuous circle. Unfortunately, there are both long-standing barriers, and emerging challenges to, an inclusive citizenship. These include issues of race, gender, class, wealth and education (among many) as long-standing barriers to the full participation of citizens, and the emerging changes in the way we communicate and interact that are so often driven by new technologies which threaten social interaction at a local level. The ability of the public to determine what is of value clearly faces many challenges. However, a focus on public value can be part of the solution and can lead to a 'virtuous circle' where a focus on public value increases the capacity of the public to determine what is actually of value to them.

Citizenship

Citizenship is a contested concept, where multiple normative accounts abound. Common across all the various theories is that citizenship has, at its core, a set of rights and obligations. How extensive these are, and how they are determined, varies between the liberal ('thin') and republican or ('thick') conceptions. The source of the rights that individuals have, and their extent, defines differing conceptions of citizenship. Regarding the source of rights and obligations, they may pre-exist the creation of any political community, such as is the case for liberal theories, or be created and sustained by participation in the political community, such as with the republican theories.

The liberal conception of what we are owed is underpinned by the idea that people have 'natural rights', such that individual freedom pre-exists the creation of the state, which is merely instrumental as the most efficient way to protect the freedom of the individual by upholding the duties individuals have not to infringe upon the freedoms of others (Faulks 1998: 17). These natural freedoms consist, essentially, of the security of ones *"life, health, liberty and possessions"* (Locke 1980: 107) and the ability to own *"whatsoever, then, he removes out of the state of Nature [and] mixes he labour with it"* such that it becomes private property (Locke 1980: 116). Citizenship is therefore basically an "*expression of a contractual relationship between equal individuals"* with a minimal content (Faulks 1998:

17). Thus, liberal theories of citizenship stress individual freedom as both a right and as an obligation and beyond that, provided this basic right is not impinged upon, pretty much anything is fair game.

Liberalism is criticised for lacking a strong sense of community or obligation, driven in part by the separation between society and politics, public and private, but also by the de-coupling of rights and duties beyond non-interference (Faulks 1998: 20). It could be argued that the idea of the liberal *"absolute priority of the right"* does not exist, but rather our sense of good and therefore of what is right comes from our participation in a community (Mouffe 1991: 74). Indeed, a focus on individuals and their rights may even devalue civic activity (Mouffe 1991: 75).

In a practical sense, few actions have no consequences, and no one is an island. For Glendon (1998: 113), the liberal account, which emphasises the absolute nature of rights (in particular property) while downplaying the role of obligations, treats the bearer of rights as a *"lone autonomous individual"* where others are not affected by the exercise of rights, and citing the example of the right to self-ownership relating to the wearing (or rather not wearing) of seatbelts. The assertion that as it is your own body to do with as you please, and therefore you have no responsibility to wear a seatbelt as it won't affect anyone else, *"ignores the fact that it is rare the driver … does not have a child, a spouse, or a parent"* (Glendon 1998: 113).

Despite this, we should not throw out concern for rights, even if the idea of the rational actor citizen is *"rotten to the core"* as *"there are still many, relatively pragmatic reasons for caring about rights in the modern world"* (Bell 2005: 226). In an increasingly interconnected world, with a diverse array of cultures, the challenge to specify and guarantee an acceptable minimum set of universal rights remains, for example.

In contrast to the minimal conception of rights and duties and the self-interest and privatism which characterise liberalism, republicanism and other 'thick' accounts of citizenship stress a positive freedom which is negotiated and secured through participation in the political community (hence being positive) and place the public interest and commitment to public life at their core (Delanty 1999: 31). Rights and obligations as a thick conception of citizenship have two elements, the formal and informal, the former being those which carry a punishment and the latter being voluntary and are better thought of as *"an expression of solidarity and empathy with others"* (Faulks 2000: 82) and are culturally specific and placed in a particular social reality to which we had no ability to consent (Bellamy and Warleigh 1998: 462; Sandel 2010: 224). These voluntary rights and duties are for Oaks (1998: 97) responsibilities *"to one's fellow beings, to one's community"* such as tolerance trustfulness, patriotism, respect for human and civil rights, participation in the democratic process and devotion to the common good, which he characterises as *"the rent we pay for the privilege of living in a civilised society"*. This ideal, however, presents a challenge to prevent politics from becoming *"privatistic or statist"* (Delanty 1999: 33).

Historically, citizenship has been linked to participation, such as in the ancient city states of Greece and Rome (Hoffman 2004: 103). This *"associational character"* of a citizenship that is rooted in the republican conception has its advantages, as it is through participation that citizenship gains its meaning. This can yield social capital benefits, and when participation defines the citizen the prerequisite need for a shared culture or identity for citizenship is not terribly important (Delany 2000: 34-5).

These normative accounts of citizenship explored here are of course just that – normative. They represent ideal conditions and *"have a tendency to ignore society and its more banal forms of everyday life"* (Beck and Sznaider 2006: 22). In practice, rights are negotiated and contested, governments to varying degrees protect or infringe upon individual freedoms and some citizens participate in processes of democratic debate while others do not. Undoubtedly, citizens need the opportunities to participate in the political and non-political spheres to be full and equal citizens. If we accept that participation is both a right and a duty (Bellah 1998: 18; Hoffman 2004: 105) then we must have concern for the ability of people to participate.

Inclusive citizenship, as put by Nancy Frasier, is the ability of "*all (adult) members of society to interact with one another as peers"* (Fraser 2003: 36). This sounds very simple, but of course there are many barriers to achieving this ideal in practice. A wide array of forms of social difference, including race, poverty, inequality, age, disability and gender, are recognised as barriers to equality and justice (Walker 2009: 617). These forms of 'social difference' that are associated with injustice and with problems accessing decision-making are also very geographically differentiated, such that for *example "a working husband living in the north of England may experience privileged positionality as a result of his gender or nationality but marginalised positionality because of his class and regional location"* (Sheppard 2002: 322). It is necessary to overcome these barriers to "*ensure equality opportunity for achieving social esteem"* through independence, respect and access to the material resources necessary to participate (Fraser 2003: 36)

Inclusive citizenship is as much about recognition as it is about access to formal rights – although that is not to undermine their importance. To overcome the barriers and to achieve an inclusive and participatory citizenship requires *"a new politics of the common good"* (Sandel 2010: 263-269) which involves:

- a reinvigorated shared sense of community;
- a moral limit to marketisation of the public sphere;
- addressing inequality which undermines the solidarity that democratic citizenship requires and leads to a loss of civic virtue; and,
- engagement with moral issues and disagreements in public life.

An inclusive citizenship at an individual level rests on the actions of others, and of organisations and institutions at a range of scales.

The democratic public sphere, where citizens debate contentious matters in the hope of reaching understanding and agreement on issues of concern to all, has to be free from domination by individuals and interests (Habermas 1979: 3). The role of private organisations in citizenship has increased in at least two important respects. Firstly, the transformation of government and public institutions has seen the state withdraw from certain functions, and the transfer of certain functions to non-state organisations, which creates an increasingly complex *"new geography of governance" (*Bulkeley 2005: 882). Secondly, private firms are now significant guarantors (or blocks) to the rights of citizenship, such as by facilitating or limiting free expression through online platforms (Crane et al 2019: 70-72). The conduct of private firms therefore has the potential to significantly impact upon the ability to exercise the full rights of citizenship in the private spheres of life.

Another big change which can enable or constrain the ability to practice a full and inclusive citizenship, and which sees a significant role for non-state actors, is the role of the workplace in the contemporary economy. The pay and conditions of work play a significant role in having time and space to participate in wider issues of concern to a community. You cannot attend meetings if you are working constantly. However, as the barriers to participation are reduced by technology, this could be overcome. However, there remains the issue of socialisation and the role of workplaces and workgroups in embedding and practicing citizenship in its fullest sense. Though industrial citizenship has predominantly focused, with significant merit, on the role of trade unions in the practice of political rights to secure advancement in social rights in the workplace, industrial citizenship can be much broader (Strangleman 2015). The way in which an employer behaves can therefore shape and make, or constrain, active citizens.

From the standpoint of individuals, the state, and private enterprise, there are behaviours which can either enable or constrain inclusive citizenship. The rest of this chapter focusses on the contribution that a focus on public value can make to achieving the common good. The chapter explores the contribution that a focus on public value can make to achieving an inclusive citizenship where participation can reinforce participation in a 'virtuous circle'.

Where is public value decided?

What is of value to the public is decided by the public. The definition of who are the public is not itself fixed and may have a multi-scalar and complex geography. Regardless of how it is defined, what is of value is decided at that level, so the public may be the whole nation, or it may be a relatively small 'community of interest' which emerges around a particular development. Given, though, that in any given cultural context we have the same values (albeit differentially weighted in their importance from person to person), in the remainder of this chapter the assumption will be for a public co-terminus with the nation, but with the understanding that the issues are applicable regardless of the scaling of the public.

There are two levels of analysis of relevance to deciding and managing public value. Firstly, at the macro-level what is valued and considered legitimate by the public, however defined, is *"continually contested in the public sphere and requires the participation of the various stakeholders who play their role in the definition and realisation of public value"* (EY 2014: 7). Secondly, at an operational level for policies, plans, programmes and projects, there needs to be a commitment to inclusive engagement and participation of the public and of stakeholders. Taken together, these two elements of a deliberative process allow 'the collective' to take competing choices and answer the question *of "what they value most and what adds value to the public sphere?"* (EY 2014: 10).

Effective deliberation

The public sphere, as the arena in which public value is debated and decided, relies on various *"modes of publicness"* (Calhoun 1997) which include, among others, everyday activities, such as actually meeting people, occasional things such as specific events or protests, mass-mediated outlets such as newspapers and television news, and new media such as social media networks and other online activities. However, participation in these various 'modes of publicness' is not universal, and this threatens the democratic character of the public sphere.

There may be many barriers to individuals or groups taking a full part in the discourse of the public sphere. Barriers may include material scarcity, poor quality or availability of necessary infrastructure, a lack of the necessary skills or education, and many other factors which may prevent people from having the time, opportunity or ability to take a full part in public life.

The decline in civic association, which has been widely written about, with a seminal contribution being Robert Putnam (2005)'s *"Bowling Alone"*, poses another challenge to the democratic character of the public sphere. Emphasising autonomy from *"established institutions"*, civil society also *emphasises "freedom to associate and a commitment to the common good beyond particular interests"* (van Amersfoort 2005: 395). Although civil society associations are not the public sphere, and can be simply special interests seeking special cases, the general trend of a decline in association with other people in our neighbourhoods, towns and so on, is well-documented and problematic. The general interaction of a diverse array of people apart from the formal structures of the state is an essential element of the democratic public sphere.

Voluntary associations, public spaces, media and infrastructure all support the free expression and discourse in ideas that are vital to public value. If barriers exist, and association is in decline, then the public sphere is open to domination by elite interests that have the resources to participate. This may manifest itself in situations where the terms of debate are set to intimidate those without the right educational stamp of approval, for example. Consultation events held only during the day, overly technical language, and requirements for certain qualifications or institutional allegiances are just some examples of the ways in which debate can be restricted.

Technology should present new opportunities for discourse, but it is not necessarily straightforward. We see a proliferation of niche media that is significantly denationalised (both local and international) and that is undermining 'traditional' mass-media outletssuch as newspapers. Is the polarisation of debate and media consumption, seen in the 'echo chamber' effect of social networks online, a taste of the direction in which macro-level communications are going? At the same time, despite ever increasing ways to connect with other people, many people engage in less everyday social interaction with those people they reside closest to. It may be that increasing interconnection is breaking down the concept of a standalone public sphere contiguous with the nation or state, and rather connecting us to likeminded groups spread across the globe.

Understanding and overcoming these challenges to participation in the public sphere is vitally important as it matters who participates and on what terms, given the opinion generated should carry some authority (Habermas 1979). The key issue is that people need to have access to the resources and ability to participate. While this is a challenge for society in general, that does not absolve individuals and organisations of playing their small part. The challenge specifically places a burden on organisations, agencies, companies and so on to deal with new modes of communication, to overcome polarisation of opinion, and to include excluded groups in their own engagement with the public.

The role of public values in an organisation is important. The interaction between organisations and their external environment, and how interests are transformed into decisions is mediated by the values within an organisation (Jørgensen and Bozeman 2007). Public values such as openness, integrity, secrecy (which can be a good thing in some circumstances, such as when it comes to data protection and security, for example) and human dignity (Jørgensen and Bozeman 2007: 371) have to be embedded and practiced by an organisation and its employees. Public services need to look beyond the ballot box, while private companies must properly commit to meaningful relations with their stakeholders. These are public values in practice, and they come down to the actions of individual employees as directed or constrained by a wider strategic direction from senior management and public policy.

Engagement and participation

There is a requirement to overcome barriers to participation in the engagement and communications activities of agencies, organisations, projects and so on. What works and what does not when it comes to communication is a crowded field. Taking an array of principles of engagement and decision-making for equity and justice (Hampton 1999), I group these into three themes: procedures, information and application.

Procedures for decision-making should be consistently high quality, developed in a tailored way for the affected public and with their involvement, run throughout the decision-making process and be proactive in seeking interested and affected parties' views without undue privilege for any group. The procedural matters are important to ensure that the right information is gathered and disseminated appropriately, and no significant people or information is excluded from the decision-making process inadvertently (or worse still, advertently).

Information in any engagement process should be freely available and widely understandable in the specific context in which it is generated and delivered. There needs to be a two-way commitment with participation of the public and stakeholders actively sought as a means of ensuring any process is an expression of public values Information must be appropriate to the people and places where will be consumed, recognising issues such as individuals' levels of expertise, time commitment, ability to access information and so on. Never before has it been easier to make information available, but it is no panacea to simply share everything online. While technology is helpful, geographies of access to the internet still tend to exclude the older and less wealthy, and those in rural areas. Over-sharing information can bury the reader, and unedited it may not be widely understandable.

Finally, having gone to the trouble of designing a robust process and having ensured a wide array of representation, the application of that effort must demonstrate that it was worthwhile to get involved in the first place. Any impact needs to be demonstrable or reasons for it not being so must be provided. More broadly, this should form a key part of a transparent and credible decision-making process.

Much of this is very common knowledge, but it still is not done consistently well. The benefits and risks, particularly at a project level, are well known and clear. Despite this, the quality of engagement with citizens is all too often poor, with limited, checkbox consultations at one end of the spectrum and exhaustive processes of Unlimited Never-ending Consultation Leading to Exhaustion at the other extreme (Johnstone 2014). There may be reasons for this, however, the role of good engagement in the management of public value is additionally worth highlighting in particular, if public value is itself an important aim in policy and projects. There is no point orienting towards public value at a strategic level without an operational commitment both to effectively uncover what that might be and to implement it in project practice.

Original opinion polling for the University of Central Lancashire and Cooper Consultancy in 2018 revealed that only 5 per cent of people believe that it is either not important or a bad idea to "*Give people more say in important decisions affecting their country and community"* as opposed to 77 per cent believing it to be important and 18 per cent thinking it a top priority. Thinking specifically about infrastructure and housing, as can be seen in table 5.1, making people more interested in these vitally important topics is mostly an engagement issue, yet in separate questioning only 33 per cent of people felt there was enough information on this topic for them to provide a view when questioned.

Table 4.1: What would make you more interested in infrastructure and housing?

What would make you more interested in infrastructure and housing?	
More public awareness to help me understand more about it	57.2 per cent
Direct contact from organisations that build infrastructure and homes	36.4 per cent
The benefits of infrastructure need to be more clearly explained	59.8 per cent
More public consultation on projects	44.0 per cent
Mass media coverage – TV and Radio programmes about infrastructure	29.5 per cent
Other	2.9 per cent

In 1998 in the Danish city of Aarhus, the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was signed. The Convention enshrined the right to participation and access to information in environmental decision making for citizens in many European countries. More than 20 years later, we should not need to repeat the importance of, and need for, good participation. However, as an example from the UK context, many new projects engage with citizens through some national or local form of development control. The land use planning system in the UK is often *‘confrontational and adversarial’* rather than enabling *‘constructive dialogue’,* and consequently the planning process in the UK is often seen as a *“bureaucratic process which stifles innovation and growth rather than a means of helping to define and support the delivery of the nation’s priorities”* (Rozee 2014: 135). Therefore, it is necessary to reiterate the importance of good engagement, not because it is itself novel, but because despite how widely known the benefits are, the practice is still poor, and this poses a problem for achieving and measuring public value.

Summary and conclusion

The ability to participate as equals in the public sphere is at the core of a full and inclusive citizenship. The requirement for members of the public to effectively deliberate on what is of value is at the core of public value. Therefore, an inclusive citizenship is a requirement for public value, and public value can contribute to an inclusive citizenship. However, there are barriers common to both, such as wealth, geography, status, education and so on, which undermine the capacity of individuals and groups to participate in public life as equal citizens, and therefore to define what is of public value with some authority. The benefit of overcoming those barriers to both general public life, and specifically for projects and so on, are a closer alignment of activities to public priorities, greater legitimacy and ideally greater success in the short and long term. Poor engagement from a project or plan can damage trust in institutions, and convoluted, formal and adversarial processes which pit neighbour against neighbour can undermine communities. At an operational level, there needs to be a focus on good processes that are aimed at the right outcomes, which include the appropriate range of citizens and interests through proactive, tailored engagement. This will uncover not only what is of value, but then in so doing, will prevent the undermining of trust which damages participation in the public sphere. A focus on uncovering what the public value therefore contributes to the creation of public value, which can in turn initiate a virtuous circle of good public value management.

5. Public value management and social justice

Aidan Worsley with Rick Wylie

Introduction

It is worthwhile briefly reflecting on the emergence of public value management as a paradigm for understanding the movement of public administration through the modern era. Public administration, broadly speaking, was a ubiquitous construct for framing government activity and, in particular, for examining what public sector organisations and public sector managers actually do. Modern public administration – often characterised by a traditional, Weberian bureaucratic model – borrowed in its theoretical underpinnings from authors such as Taylor's (2009) scientific management model of work organisation. Moving forwards, new public management (NPM) can helpfully be understood as offering a response to public administration, by critiquing its favouring of monopolistic forms of provision and by constructing rationales for wider ranges of providers and a more market-orientated approach (O'Flynn 2007). In the early 1990's, authors such as Hood (1991) set out NPM's key components which included issues such as: hands on professional management, greater emphasis on standards and performance measurement, competition in the public sector, importing private sector styles of management and greater discipline on fiscal and resource control. For managers, as a corollary, NPM had a major focus on improving their capability, constructing central goals from corporate planning, engaging in competitive tendering and performance management and having an auditing culture, all factors which were– indeed *are* – common features of modern public organisations. These features will clearly ring bells today and for some years to come, so entrenched are they in the modern public organisation's construction. But, how does that actually 'feel' for those who interact with these organisations? To what extent can we characterise the weaknesses of NMP as we perceive contrary factors such as unresponsive governments, inefficient practices and a political tier leant on by interest groups, acting more in self-interest than in the public interest (O'Flynn 2007)? Indeed, the emphasis on competition and privatisation, it is argued, still awaits evidence of real efficiency gains and the reduction in size of civil service organisations has actually led to a decline in accountability (Minogue 2000). It is this contested context of the 'post competitive' that public value management affords the ground from which the public value paradigm emerges.

The public value approach draws heavily on the work of Moore (1994) – although a definitive definition remains hard to agree. We can observe in the literature certain dominant themes, including a responsiveness to service user preferences, the renewal of trust through quality provision, a consideration of satisfaction and a greater role around engagement, with citizens as overseers of government and customers becoming more characterised as service users (O'Flynn 2007). For public managers, as we move through this paradigm shift – and that is by no means a given across the broad sector – their situation appears to lack clarity. How should they respond to these new messages? They have responsibility in some measure for a public value that is hard to determine and hard to demonstrate.

Public managers create public value. The problem is that they cannot always know for sure what that actually is. It is not enough to say that public managers create results that are valued; they must be able to show that the results obtained are worth the cost of private consumption and the unrestrained liberty forgone in producing the desired results. Only then can we be sure that some public value has been created. (Moore, 1995). Thus, for managers, how we understand public value is key to creating a visible demonstration of value. But that is not all. Public value, it is argued, is founded on a relationship of trust with those who experience services. Kelly et al (2002) for example, argue that public value has three 'building blocks': services, outcomes and trust. Services are the actual vehicle that delivers public value; outcomes represent a higher achievement, such as public health and finally, trust is critical to public value creation. In fact, even though the desired outcomes are achieved, a failure to build trust can destroy public value. Thus, even managers who are used to demonstrating value through more NPM routes around services with targets and quality monitoring face the problem that without trust this can amount to nothing. One of the elements that makes this an especially interesting movement is how the paradigm is shifting into newer, less concrete and distinctive areas. Quantitative displays have been the bread and butter of modern organisations – but how do organisations enter a different, more qualitative sphere that isn't to do with 'how many' relationships one has, but rather 'what kind of' relationships and the quality of them. How can you, for example, quantify trust?

The challenges are significant as the obvious first step for the public organisation is a renewed emphasis on activity linked to consultation and communication and, given that this may be new territory for the public managers, are we sure they have the skills to deliver this? Smith points out the task ahead: *"Public officials must engage political authority, collaborate with each other within and across institutional boundaries, manage efficiently and effectively, engage with communities and users of services and reflectively develop their own sense of vocation and public duty"* (Smith 2004).

It is here that we find more interesting ground for public value management – its engagement with communities, its sense of vocation and public duty. These areas are, to a certain extent, new for the new public manger and for the modern organisation. They fundamentally imply a far greater sense of externality than has hitherto been the case, as organisations need to not just 'reach out' but instead must respond to the agendas of the communities and users to which they provide services. Of course, this is challenging territory as not only are organisations more used to delivering services 'to' rather than 'with' communities, in turn, communities are seldom built with the infrastructure that makes connecting with them easy, nor are those communities used to articulating their needs to help design and deliver services. Benington (2011) argues that public value has two main components: what the public values and what adds value to the public sphere. Here we can ask ourselves some intriguing questions. Are what the public values and what the public need one and the same thing? Where do the public's needs and wants fit into this line of thinking? As a natural corollary we must also understand that we are dealing with something that necessarily changes over time.

Public value: What the public values, needs and wants

To try and answer some of these questions it is appropriate to try and understand what 'the public' needs and values. The work of Maslow (1968, 2013) is a useful place to start this line of thinking. Maslow was, in essence providing a way of understanding, from a psychological perspective, a hierarchy of needs. He sought to understand individual motivation to meet need and achieve happiness. This was commonly represented in the form of a pyramid (although pyramids and triangles were not present in Maslow's original work) where people would initially seek to satisfy basic needs before being able to pursue more advanced needs. Thus, physiological needs (including food, water sleep) are built on by safety needs (including security of environment and employment). In turn comes 'belongingness' (including love, friendship, intimacy) and esteem (including confidence, self-esteem, achievement) before we reach the peak of the pyramid with self-actualisation (including morality, creativity, problem-solving). In striving to meet these ascending needs, the individual also achieves happiness. In this typical representation of Maslow's hierarchy, one can be struck by its relatively internal and individual orientation. But this would not be a correct interpretation. Maslow firmly believed that the healthiest and happiest people tended to be those who were more involved in their communities, with a distinct sense of kinship with the human race. It is a clear sense of belonging that matters. We are therefore able to make a clear connection between the achievement and actualisation of the individual and the community needs.

Of course, it would be remiss not to note some of the weaknesses of Maslow's approach. Critical focus tends to centre on Maslow's methodological approach. In unpacking the notion of 'self-actualisation', Maslow used biographical analysis, choosing 18 individuals he identified as having reached the peak of the pyramid – and then examining their biographies for shared characteristics. Clearly this has a subjective bias that weakens the approach but this is compounded by the people that Maslow selected which were prominently highly educated, mostly white males. One could be forgiven for thinking that Abraham Lincoln, Albert Einstein, Gandhi and Beethoven (some examples of Maslow's choices) are not the run of the mill individuals from which to draw inferences about the wider population. Another area of critique lies in the notion of the hierarchy, as he places emphasis on the meeting of lower or 'deficiency' needs before meeting those higher 'growth' needs. Thinking tends to view needs and motivation in a more pluralistic manner, as people may focus on higher growth needs at the same time as being concerned with meeting lower physiological demands. Living in poverty, it is argued, doesn't mean that we do not place an emphasis on our needs around love and belonging. This perhaps ought best to be seen as a useful adjunct to our understanding of Maslow as being more pluralistic than hierarchical, as this may be the arena of understanding that offers an insight into how we look at public value. In a nutshell, poorer communities have needs for self- actualisation as well as physiological and safety needs.

Maslow has, for many years, been a favourite of management theorists and practitioners, especially where managers have sought to move away from a traditional, transactional approach to management where, in exchange for money, employers expect work to be done. Instead, Maslow supports a more relational management approach where companies look to provide a broader range of opportunities for staff to feel fulfilled. Why would they do this? Simply because this course of action enables them to expect more from employees in return.

A public value approach for managers is based upon a wider view of the impact of an organisation on society. It requires a wider take on the role and the scope of an organisation working beyond its boundaries and even outside its original mandate. For many organisations the world has changed significantly since their boundaries and mission were established, and a public value perspective that is designed to maximise the contribution to the common good requires not just an appreciation of human values but also of the concept of social justice.

And it is here we take our next conceptual step and consider the notion of social justice – another complex concept with no definitive agreement on its meaning. Matwick and Woodgate (2016) attempt an instructive concept analysis coming from a nursing background in acknowledging the phrase's central location in the value bases of many socially orientated professions (and arguably public organisations). Social justice is clearly linked to notions of egalitarianism, fairness, and equality of opportunity. It can often also be linked to the distribution of wealth, opportunities and privileges. But there is also an implicit element about the need to address social (in) justice – with attendant implications for action by professionals, organisations and communities, by recognising and acknowledging oppression and inequity. For Matwick and Woodgate (2016) social justice is not just about recognising equality, but about encouraging the performance social action in its pursuit.

Torres-Harding et al (2012) engage the issue from a community psychology perspective. They view social justice as underscoring the value of engaging and collaborating with marginalised groups in a process of civic participation. Some authors go further and argue that social justice is actually the process of engaging with individuals as co-participants in decision-making with a view to social action. It is this combination of purposeful activity through relational work that chimes so closely with our understanding of public value.

Social justice remains a complex and contested concept, with definitions often shaped by the cognate discipline from which they are viewed. To reach back into the concept's fundamental underpinnings, Miller (1999:1). sets a baseline understanding of social justice as *"how the good and bad things in life should be distributed among the members of a human society"*. Words such as 'how' and 'should' reveal how slippery a concept it can be. Politically, for example, the right may view social justice as involving individual liberty, social and economic order, the left may seek to emphasise its traits of equal distribution and the expansion of civil liberties, while a more post-modern perspective might stress the inclusion of marginalised groups (Reisch 2014).

It is interesting to reflect on the relationship between social justice and social inclusion. Both concepts focus on what is unjust and who is excluded, often within some form of policy context. The Charity Commission in the UK provides a particularly clear approach and contrasts social inclusion with exclusion, suggesting that inclusion results from positive action that changes circumstances and *"enables people or communities to fully participate in society".* Whereas social exclusion is, "*the phenomenon where particular people have no recognition by, or voice or stake in, the society in which they live*", which may be linked to adverse structural factors such as unemployment, health, age, education, and housing (Charity Commission 2001).

Observing the UK, it can be revealing to consider the disparity that exists between the relative levels of inclusion and exclusion that exist not just between people and communities, but between wider socio-geographic areas, and how the concepts we have defined emerge in the current policy context. A recent initiative around the 'Northern Powerhouse' used that broad term when seeking to address perceived disparities in a range of areas including economic success, skills development and devolved decision-making – in comparison with the 'south' (Northern Powerhouse 2020).

More recently, following the election of a new conservative administration in December 2019, we have seen the emergence of a 'levelling up' agenda. Generally speaking, the phrase encompasses a range of prospective policy reforms that seek to equalise the unequal distribution between the regions of the UK (Guardian 2020). Spending plans around large infrastructure projects such as roads, education, technology, broadband and rail all feature in various government initiatives that are currently under way and can all be at least partly understood with reference to an awareness of social justice and social exclusion.

Social justice in the public sphere

Having considered the concepts of public value management, social justice and the hierarchy of needs, let us now take a sideways step to look at how our societies' attitudes may or may not feed into this approach – to try and answer the key question: *is this rich ground for the public value-orientated manger*? The annual British Social Attitudes survey explores various key elements of the national psyche. Using a random probability sampling method, it surveys 3000 people to ascertain public opinion. In British Social Attitudes 34 (Clery et al 2016) which looked to examine attitudes within the trends of difference marked by the public's experience of austerity and Brexit. Perhaps unsurprisingly, a mixed picture emerges which BSA characterises as *"a kind-hearted but not soft-hearted community"*. It finds, for example, that, for the first time since the financial crash of 2007-8, more people are in favour of tax and greater public spending (48 per cent) than of things staying broadly as they are (44 per cent). Furthermore, 42 per cent of people agree that the government should do more to redistribute wealth from the rich to the poor in our society (only 28 per cent disagree with this). Health and Education remain the key areas where people think we should direct public spending – with 83 per cent in favour of more spending on Health for example. Looking more closely, it is interesting to note that considerably fewer people now see dole claimants as 'fiddling' – dropping from 35 per cent in 2014 to a record low of 22 per cent in 2016 – its lowest since 1986. Also, at a record low, 22 per cent of people think that social security claimants do not deserve help. In these senses we see evidence of the greater 'kind heartedness' that the BSA survey detects. But, not being soft hearted is evidenced elsewhere – especially around issues of crime and terrorism – but its noteworthy that the public see benefit fraud as a greater offence (91 per cent) than tax evasion (56 per cent) (Clery et al 2016). Unsurprisingly, we find mixed attitudes across a range of issues, demonstrating clearly also, as we have seen, how these change over time. It's interesting to note also that our concept of social justice has some footholds in British social attitudes but is not a clear-cut issue when applied in its broadest social sense. To determine what 'value' the public will place on interventions we will need to think carefully about what it is, exactly, that we are looking at and how we might know if we get there, and understanding that we are not looking at a static phenomenon but one that changes over time.

Child poverty is an interesting example. The BSA report on public attitudes to poverty and welfare (Clery et al 2013) explored attitudes between 1983 – 2011 and noted that in 2009, alongside a significant government policy initiative, 82 per cent of the public thought the reduction of child poverty was 'very significant'. In contrast only 1 per cent thought it 'not very' or 'not at all' important. Interestingly, in 2011, 74 per cent of the public felt the reduction of child poverty was the responsibility of central government, with 54 per cent looking to local government to take responsibility. Yet, having declared their views around responsibility for poverty eradication, 66 per cent of the public go on to express a view that the main explanation for the causes of child poverty are linked to personal characteristics and behaviour, with relatively small numbers viewing child poverty as inherent to – or generated by – society (Clery et al 2013).

Moving more deeply into the arena of attitudes and infrastructure, Copper Consultancy have produced an independent report on how we might better understand the link between how, as innovators and managers interested in public value, we can make the case for infrastructure investment clear enough to ensure that it receives public support. Based on a representative sample of over 2000 of the adult UK population they undertook a survey in July/August 2017 and published their report in November of that year (Copper Consultancy 2017).

The questionnaire includes a series of propositions designed by UCLan's Applied Policy Science Unit to probe value categories, drawing upon the work of Ronald Inglehart (1990) (which were informed by the work of Abraham Maslow (1943, 1954 etc) to analyse value categories by beliefs about key areas of infrastructure policy and attitudes towards projects[1].

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[1] For a discussion of Inglehart's contributions, including the theory of postmaterialism, see chapter 2, this volume.

When asked about the most important criteria in deciding what infrastructure the country should invest in, 78 per cent looked to helping the economy in the long run, 65 per cent suggested helping cities in the UK to connect and 43 per cent mentioned helping their own local community. Using quotes from respondents they illuminate some of their thinking – such as this 54-year-old male from the south east who makes distinct links to notions of self-actualisation and the area in which he lives:

"Infrastructure is vital to people getting on with every-day lives. It provides a safe, reliable and convenient environment, enabling us to explore where we live, enrich our lives, go to work, see friends and family and be part of the local community."

Likewise, a 40-year-old female, also from the south east:

"None of us can pursue our education, our careers, our hobbies, or our daily life without the backing of good infrastructure".

(Quotes from Copper Consultancy survey 2017)

The report also delineates responses along socio-geographical base i.e. city, town and rural, finding that whilst large scale agreement placed the benefits to the economy in the ascendency, this was especially pronounced in the rural areas, but less so among the city respondents. Likewise, the benefits to the local community of infrastructure investment were more pronounced in the rural and town areas than the city. Interestingly, it was only on the areas of 'making my own life better' that the city-based respondents significantly scored higher than town and rural. Age was also a delineating factor in some areas of the survey. For example, when asked whether improving 'quality of life' should be a priority in deciding where to make infrastructure investment, the three youngest age brackets all agreed (with over 50 per cent positive response), compared to the three oldest age groups which all scored under 30 per cent. This was at its highest differential between the 25-34 age group who scored 63 per cent whilst the 65+ age group was only at 21 per cent for agree.

Social housing is another interesting element of the survey and they found a large measure of agreement on this topic, with 67 per cent choosing more social housing over more houses for sale. This preference, interestingly, transcended voting/party political preferences with both Labour and Conservative supporters preferring more social housing, although unsurprisingly, this was considerably more pronounced in the Labour group (+56 per cent to +12 per cent). But perhaps what matters most in this regard is the information on which people form their views around, in this case, infrastructure and investment – and in this there was also a large measure of agreement with over two thirds of the public feeling they had insufficient information, with a 31-year-old female, Birmingham saying:

"When it comes to big infrastructure projects, although there is lots of information out there, I feel not enough reaches the little people – us – or maybe we just don't know where to look".

Again, it is interesting to look at how this differs in socio-geographic areas. City dwellers felt, albeit by a small margin, that they had enough information on infrastructure investment, but this was a feeling clearly not matched in town and rural settings. This suggests that our structures are perhaps more refined in city areas, but these methods can struggle to reach beyond the city walls.

Section analysis

Our research focus helped direct the choice of questioning for Copper Consultancy's research in certain key areas to try to understand more where public value and the needs as expressed by the public overlapped with the concepts we have considered drawing from Maslow. Respondents were asked a series of questions related to what the aims of the country should be for the next ten years and expressed views on how much of a priority particular areas should be. Given this representative UK and Republic of Ireland (RoI) sample we are also able to cross reference using a variety of criteria (gender, age, region (north west etc), city (Belfast etc), rural/town/city, voting behaviour (both general election and 2016 EU referendum).

The questions were asked in a battery of propositions given after the following introduction:

"And now some questions about the country as a whole. There is a lot of talk these days about what the aims of this country should be for the next ten years. Here are some of the aims that different people would give top priority to. How important do you think it is to…" … and then each of the three propositions reported below focusing in turn on 'Physiological needs', 'Belongingness' and 'Self actualisation' were inserted.

Figure 5.1: Physiological needs (Copper Consultancy survey 2017)

…Ensure all people live in safe and secure surroundings		
A top priority	952	47.4 per cent
Very important indeed	702	35.0 per cent
Fairly important	278	13.9 per cent
Not important	40	2.0 per cent
Undesirable a bad idea	24	1.2 per cent
A very bad idea	11	0.5 per cent
Total	2,007	

In figure 1 we find, unsurprisingly, a sharp positive view towards the importance of living in safe and secure surroundings which, of course, links directly into our outline of Maslow's hierarchy. Key delineations occur around age with a 20+ per cent difference between those seeing this as a top priority in the 25-34 age group compared to the 55-64 group. Another noticeable spread occurs around voting patterns, with Lib Dems seeing this as a top priority far less (38 per cent) than Conservatives (50 per cent).

Figure 5.2: Belongingness (Copper Consultancy survey 2017)

…Give people more say in important decisions affecting their country and community		
A top priority	362	18.0 per cent
Very important indeed	908	45.2 per cent
Fairly important	636	31.7 per cent
Not important	73	3.6 per cent
Undesirable a bad idea	22	1.1 per cent
A very bad idea	6	0.3 per cent
Total	2,007	

Figure 2 outlines the overall responses for a question that explores issues of what Maslow termed 'belongingness' and what we might broadly term engagement which recorded an almost universal attitude with just under 95 per cent seeing this as a priority. One can witness a relatively stable incidence of support for this priority across most demographic areas. Perhaps unsurprisingly, in terms of voting patterns, this issue came across louder in certain areas (Scottish and Welsh Nationalists) which one might characterise as marginal to the Westminster majority. But it must be said, this evidence suggests that the public see this as an issue of lesser priority than other areas.

Figure 5.3: Self-Actualisation (Copper Consultancy survey 2017)

…Ensure that all people are motivated to achieve their full creative potential		
A top priority	449	22.4 per cent
Very important indeed	817	40.7 per cent
Fairly important	589	29.3 per cent
Not important	136	6.8 per cent
Undesirable a bad idea	12	0.6 per cent
A very bad idea	4	0.2 per cent
Total	2,007	

Figure 3 examines the extent to which the achievement of ‘full creative potential’ should be a top priority for the country for the next ten years. Perhaps surprisingly, it fares only marginally less strongly than ‘having a say’ – 92.4 per cent feeling positive about this – and interestingly, more people felt that this was a top priority. Gender splits were very even, but the regions come out strongly in favour of this priority especially the Republic of Ireland and Wales.

Thus, we find, overall a strong argument for all tiers of Maslow’s physiological, belongingness and self-actualisation needs, but with a strong performance for the latter that links closely into the public’s view of the priority of the economic benefits that need to emanate from infrastructure investment.

Conclusion

This chapter has sought to understand the arrival of public value management as an illustration of the growing need for closer relationships between organisations that deliver infrastructure projects for the public. This, in turn has led to difficulties for the public value manager in understanding what it is that the public values. At its heart, managers need to engage more with their customers and communities. This may require new skills sets, but certainly it will require an understanding of the complexities of public value and of *what the public wants*. One possible conceptual framework for this understanding lies in the work of Maslow and we have unpacked a little about what he might offer to support a public value management approach. In examining this framework, we were also able to make links with the concept of social justice and how concepts of ‘fairness’ and ‘opportunity’ might be captured within Maslow’s framework. From there we moved to try to understand the public’s view of social justice – as if this was not what the public want – then clearly the public value manager may not pursue such an avenue. But we found sufficient evidence of a ‘kind-hearted’ but not ’soft-hearted’ public that is aware of the need to protect the vulnerable in society, but not, for example, to the extent that they would tolerate benefit fraud. Interestingly, those areas of self-actualisation score relatively highly and support the view that a public value management approach needs to concern itself with a range of public needs across Maslow’s spectrum and must not focus simply on the economic benefits. In this sense we have hopefully made a contribution to the promotion of positive social values in public value management.

About the Copper Consultancy survey upon which elements of this chapter are based

In July/August 2017 a representative sample of 2,007 UK adults took part in a survey about infrastructure and housing in the UK, conducted through the TLF Research Online Panel – https://www.tlfresearch.com. The survey was preceded by focus groups in London, Birmingham, Bristol and Holmfirth, Yorkshire to understand in depth what people saw as the main infrastructure and housing issues facing the UK. The questionnaire for the survey was designed to provide quantifiable information on people’s views about these issues. Included in this survey was a battery of questions probing value orientations designed by UCLan’s

Applied Policy Science These questions were based upon the work of Ronald Inglehart (1990) whose 'Postmaterialism' thesis was informed by the work of Abraham Maslow (1943, 1954).

6. Building a new public value economy – The time is now

Hazel Blears

The impact of the Covid-19 pandemic has shaken our world to its foundations. Although this event had been foreseen for many years as one of the highest risks to our health, wellbeing and prosperity, we were ill-prepared for the way it swept the world, killing hundreds of thousands of people, devastating families and, as a result of the global lockdown, wiping £3 trillion from the global economy with probably worse news to come.

It has also become clear that the virus has had a disproportionate impact on those who are the least well off, living in crowded and poor housing, without adequate medical care and often unable to earn an income during the lockdown.

What has also been true is that many communities have responded with care, compassion and practical help for those in need of support and sustenance. The pandemic has revealed our own vulnerabilities, the stark inequalities in our economic systems, and the justifiable anger of those communities hardest hit.

Over the last twenty years or so there has been a growing consensus that traditional capitalism is not providing the results that citizens desire in terms of opportunities for all, a fairer distribution of the wealth created by those employed, and the damaging impact of business practices on our environment.

Discussion about reforming capitalism has been around for as long as capitalism has. The emergence of a narrative around responsible business, seen by some, perhaps cynically, as an attempt to forestall wholesale reform, has gathered pace and support from sometimes surprising places.

The pandemic has accelerated this debate and we can now begin to see a consensus emerging that we cannot simply continue doing "business as usual". We have an opportunity to reshape our economy so that it better reflects the priorities of our people, by delivering high quality, well-paid and secure jobs, and by ensuring that businesses act as responsible corporate citizens, using their mainstream business models to have a positive impact in the communities where they operate.

Of course, businesses will still need to obtain and make a positive return on capital employed, but it is a false dichotomy to assert that being a responsible business will be at the expense of commercial success – the opposite is true. We are moving to a period when it will be those businesses with mission and purpose who prioritise positive impact that will reap economic rewards. They will be able to employ and keep the best talent, develop innovative and ground-breaking products and services, and attract and retain loyal customers. Capital will flow towards their operations as the returns reflect the strength of their business models.

The debate on all of this is now gathering pace with groups coming together under various banners such as "#BuildBackBetter" "Imperatives 21" and some excellent work by The British Academy on The Future of the Corporation, which has developed eight principles for a new settlement for business. This includes changes to the legal framework under which companies function to require them to adopt and specify the purposes they are committed to achieving and to emphasise their responsibility to a wider class of stakeholders including the communities where businesses operate rather than the current Companies Acts which have a narrow emphasis on profit and the interests of shareholders.

All this energy, if properly harnessed, can help us to make some major shifts in the role that business plays in our economy and in our communities. The problems facing us in the aftermath of the pandemic cannot be solved by governments alone. Those who are most vulnerable will be hardest hit by the downturn, particularly young people just starting out in their working lives. If this stay the same, unemployment and inequality would grow together with the poverty, alienation and waste of talent that this would bring.

However, we have an opportunity to stop this happening. We don't have to stand by and watch whole communities become desperate as they did following the Great Depression in the US in the 1930s and in the UK in the 1980s. The big question is how can we harness the power of business to create and maximise social, economic and environmental Impact to make our economy and our communities more resilient in the long term?

After the Wall Street crash FDRs New Deal aimed to get people back into work through fiscal stimulus, massive public expenditure on the renewal of roads, railways and building homes for the future. The cost of $41.7 billion is equivalent to $653 billion today.

In the UK we are about to embark on a £50 billion programme to improve roads, railways, and to build houses, but government needs to act smartly and in concert with business to maximise the positive impact of this expenditure if it is to help mitigate some of the worst effects of the economic downturn.

Following the global financial crash in 2009, as Communities Secretary, I worked together with Cabinet colleagues to create a scheme to try and protect young people from the job losses that followed. We established the Future Jobs Fund that guaranteed every young person a job for a year with businesses being financially supported to create opportunities for work. The scheme was operated by local authorities who knew the needs of their communities well and I included a provision that those local councils who came forward with a Social Enterprise partner would be at the front of the queue for assistance. I didn't do this because of some innate bias but because there was clear evidence that social enterprises could create opportunities for work quickly, they could address local needs and support young people in their placements.

Exactly the same situation exists today. Social Enterprises have an impressive track record on employment. The UKs 100,000 social enterprises already employ two million people and contribute £60 billion to the economy. For every £100,000 of turnover, social enterprises create three jobs. This compares to 0.66 jobs in the private sector. Social Enterprises often work in the most disadvantaged communities, and one in five work in the most deprived parts of the UK and almost two thirds of community businesses are in the 10 per cent most deprived areas. Social Enterprises create disproportionately more jobs in the poorest areas and so they are more likely to keep money circulating in the areas that most need it.

The government has now acted to launch a Kickstart scheme to try to ameliorate the effects of the Covid-19 pandemic on employment opportunities for young people. This is closely modelled on the Future Jobs Fund, thanks to the institutional memory of the Treasury; I hope they will also partner with social sector businesses to maximise impact for communities as well as the young people involved. This is a classic opportunity for a win-win situation.

The current discussion and activity about how we can find a better way of doing business is part of the development of a movement that has been simmering for a long time. The artificial divides between public, private and social sectors are becoming blurred. The combining of these models can be mutually beneficial and can help us to re-examine and challenge the hegemony of a 'one size fits all' traditional corporate approach.

What do the alternatives look like?

I would like to share some of my own learning about the power of partnerships between the public, private and social sectors to drive change and also why I believe that businesses with purpose and social enterprises are the most effective way for us to tackle some of the persistent and complex social and economic problems that face us all.

Throughout my own personal and political life, I've believed that social enterprises are a key way of doing business, that they can create wealth and value, provide satisfying and skilled employment opportunities and can make positive social, economic and environmental impact in some of our most challenged communities. For eighteen years I was a member of parliament and served as Minister for Public Health, for Police and Counter Terrorism and as Cabinet Minister for Communities and Local Government. These are all grand titles but far more importantly these roles gave me the opportunity to help to shape our system, our values, our legislation and our economy.

In 2009 following the global financial crash we developed the first ever Social Enterprise Strategy in the United Kingdom with every different department from the Treasury, the Department for Business, the Departments for Health, Transport and Housing all involved in how we could help to build the 'Social Enterprise economy', which would be able to take on bigger and larger contracts and could employ more people. Crucially we also wanted to begin to reshape mainstream business so that it could become more like social enterprise and maximise its own social, economic and environmental impact.

It is clear from international research that in order for people to achieve positive health and wellbeing four basic needs must be met. Firstly, it's important to have a job, some meaningful work to do, something to get out of bed for every day. Secondly, people need a safe and secure home for yourself and your family. Thirdly, one needs to have decent education and training to be able to take up the opportunities that are on offer, particularly in this fast-changing world where digitalisation is transforming the workplace. Fourthly, underlying all of this, and something that is very difficult to legislate for, is that people need to have friends and colleagues who care about them. I believe that a social enterprise approach can help us to achieve most of these basic requirements for a good life.

I continue to be involved in this area of work and policy. In the UK Social Investment Business (SIB), we provide access to patient and more affordable finance and business support to social enterprises, mutuals, co-operatives and social businesses of all kinds. This helps them to fulfill their mission in a whole range of different areas including as regards health services, education, arts and culture and housing. SIB has recently been appointed by the government to help to run the £200 million fund to tackle serious youth violence especially knife crime. I am also involved in the new Institute for Impact Investing. This is an exciting new area where we are beginning to move significant amounts of mainstream financial investment, including pension funds, into areas where they will make a positive social, economic and environmental impact.

But the UK, and the world at large, still faces many profound social, economic and environmental challenges. Some 783 million people around the world are still living in poverty, 264 million children still do not have access to education, life changing illnesses remain a threat to the lives of millions, and all of us in every continent face the devastating consequences of climate change.

We have certainly made progress since the adoption of the UN Sustainable Development Goals (SDGs) in 2015 but so much more remains to be done. Governments acting alone are unable to achieve the dramatic shift in the scale and pace of investment that is needed to tackle these challenges. Charities and philanthropists can help, but again, they cannot resolve our deep seated, long-term structural problems, by themselves at least.

Closer to home in Cumbria and in Whitehaven there are many pressing social issues. The West Cumbria Opportunities and Challenges 2019 report by Cumbria Community Foundation commissioned by the Sellafield nuclear plant lays out a stark picture of continuing inequality despite the massive investment in nuclear and advanced manufacturing that has taken place in the region over the last 50 years.

Over one third (36 per cent) of Cumbrian residents live in postcodes classified as comfortably off, which is some 9.5 per cent higher than the national average. Meanwhile, another third of Cumbrian families live in postcodes classified as financially stretched, which is 6.2 per cent higher than the national average. These countywide figures hide the pockets of deprivation in Copeland where the percentage of those who are financially stretched rises to almost double the national average at 44 per cent. Almost 15 per cent of households in west Cumbria have an income of less than £10,000 per year. All of this is in an area where the average salary of those in well-paid nuclear and manufacturing jobs are the third highest outside Mayfair in London. Taken together, these figures provide a stark illustration of the inequalities in the region.

We have some great schools that achieve nationally recognised success academically and in sporting achievement, but some children still leave secondary school with no qualifications. At a time when economic success is increasingly dependent on knowledge and innovation, one in four adults have no qualifications.

One in five people in west Cumbria have a life limiting illness and life expectancy varies by 13 years for men and 9 years for women between the poorest and wealthiest wards in the area. Obesity is a significant health issue and is linked to a wide range of diseases, including both physical illnesses such as diabetes, cancer and heart disease, but also psychological and emotional ill-health. This is notable as we have discovered that the impact of Coronavirus appears to be greater in those who are significantly overweight.

To tackle these complex and longstanding problems we need partnerships where public, private and social organisations can come together to create real and lasting social and public value. For many years there has been massive investment by the nuclear industry, much of it through charity and philanthropy which has its place but can never achieve the long-term sustainable change we need in order for people's lives to be transformed for the better.

For the last three years I have been part of Well Whitehaven – one of twelve Well North partnerships across the north of England where, despite the efforts of successive governments, we have not been able to make significant inroads into the longstanding problems of poor health. We were initially funded by Public Health England but have gone on to secure support from a range of partners including Copeland Borough Council but also a range of companies in the private sector.

From the outset we have adopted an approach that seeks to empower local people to take the initiative to change their own lives rather than imposing programs and directives from the centre. We know that lasting and sustainable change will only happen where local residents are involved, making decisions, taking responsibility and being part of the change they are seeking to make.

Of course, anyone involved in regeneration will know that this is much easier said than done. It takes time to build trust, particularly in communities who have been the subject of repeated interventions from both local and central government which have not achieved the results that local people wanted.

Physical regeneration, building new houses, and the provisions of schools and health centres are relatively easy to implement but expensive and often slow to materialize. Changing the lives of people to aspire to a better future for themselves and their families, to insist on the highest quality of public services, and to take an active role in making this happen is often a generational challenge that requires sustained long-term partnerships.

Well Whitehaven is focused on the Mirehouse estate in Whitehaven, and has a group of support partners from the public and private sectors, an active program of community budgeting and a community panel that helps to determine priorities for funding based on the issues that local people have identified as important to them. It has established a range of ongoing activities from building a community outdoor gym to help tackle childhood obesity, to 'Men's Sheds' which has been enormously successful in helping older people combat loneliness and isolation, especially amongst men, who are often more reluctant to get involved in community activity. There has been a continued focus on health and increasingly mental health, and we were able to support bereavement care for children who unfortunately lost beloved grandparents in the Covid-19 pandemic.

All of this is important work but by necessity is focused in one area of Copeland where the need is greatest as a result of limited funds and capacity. We don't have all the answers but there are many other similar areas across Cumbria that could benefit from a resident-led approach to regenerating their communities. If we are to be able to make sustainable change possible, we need to be able to act at scale and in partnership with the social, public and private sectors.

What if we were able to mobilise mainstream businesses in places like Cumbria and around the world to deploy their investment, procurement and pension funds into securing positive social, economic and environmental impact for the benefit of communities? That would be the kind of seismic shift that would bring our goals within reach. If we can provide evidence that doing good is also good business, and helps to drive commercial success, we have an opportunity to fundamentally reshape our economy to respond to the challenges we face.

This would require a redefinition of the role of business, but that debate is already taking place with many global enterprises recognising that the breakdown of trust in big business is threatening their social license to operate. This shift towards a more responsible business model is gaining pace and is beginning to blur the rigid demarcation lines between social enterprise and traditional 'for profit' organisations. Sharing knowledge, experience and support from both worlds will be of mutual benefit for those involved and for communities everywhere.

I believe that simply doing business as usual will never allow us to succeed in our mission. Ten years ago, we all experienced the fallout from the global financial crash which reverberated around the world, which destroyed jobs, homes, families, businesses and governments. The crash was followed by 10 years of austerity that saw massive cuts to public services, in health, education, housing and in regenerating our communities. Now we face the fallout from the global Coronavirus pandemic and the lockdown of economies across the world.

Public money is still in short supply. There will not be enough to enable us to give all of our citizens the opportunity of a decent life. Charity and traditional corporate social responsibility will not be sufficient to enable us to make the step change that is required for our economies and communities to flourish. My central argument is that we need to mobilise public and private capital in partnership for public good. We need to build a better way of doing business.

It sounds very ambitious but the seeds of what is now becoming a worldwide movement were sown during the global financial crash. Trust in business, trust in politics, trust in the media and trust in institutions of all kinds was shaken to its foundations in the aftermath of the global shock. People across the world were and still are angry and bewildered at what was happening to them and their families and communities through no fault of their own. We are seeing this being played out graphically in the collapse of our politics and the feelings of powerlessness of our people. I believe that unless business really changes that it will no longer have vital public support. If we are serious about changing our world, we need to change our economic structures too.

We have operated for many years across the world with old-fashioned economic models – rapacious private-sector capitalism that seeks to maximise profits with no regard for the communities in which it operates or, at the other end of the spectrum, a centralised, inflexible and sometimes authoritarian system of state control which also has little regard for the people involved and affected.

In this new world, where many young people are better educated and have access to more information through the rise of social media, they are demanding more. In a recent survey, millennials were asked what they thought the role of business should be in a modern society. Of course, they said that business operates to create wealth and to create good quality jobs, but they also said businesses had to have a wider social purpose.

92 per cent of millennials want to work for businesses with mission, values and purpose. This is powerful testament to the values of future generations. Despite the hardship that they have all experienced as a result of the financial crash, they still have amazing ethics and altruism and want to do good. I believe that social enterprise chimes perfectly with the ambitions and values of the most creative, imaginative, innovative and caring people in our society.

Social Enterprises have grown significantly across the world in the last twenty years. These represent a business model where people can reinvest their profits in doing good, but they can also create value by the intentional and thoughtful way in which they operate and can make positive social economic and environmental impact.

We have some very large social enterprises and cooperatives in this country. The Co-operative Group where I'm a Member Nominated Director is a £10 billion business. We employ 64,000 people and we operate in every community across the UK providing food, funerals, and insurance, and we are developing new ventures in digital services and in health care. Thus, social enterprise doesn't always have to be on a small scale. There are some very large social enterprises across the world creating some £50 billion of wealth and employing upwards of two million people.

But whenever you talk to people working in social enterprises, they will tell you that often their biggest problem is growing to scale and having a market for their goods and services. Social Enterprises face a problem with access to finance, they need increased capacity to take their innovative ideas, develop them, and to get them ready for market and to scale up, and they need resilience to be able to withstand the ups and downs of any business life.

Their biggest assets are innovation, creativity, agility and a passion to make change. So if we want social enterprises to grow and to have more of them in our society, we have a responsibility to create and strengthen the market for their goods and services. We have to build a fairer system that enables social enterprises to thrive and grow. The second challenge is for us to make this not a niche operation for kind-hearted people, but for it to influence the mainstream commercial and business economy so that mainstream businesses become more like social enterprises.

To address the question of access to finance, there is now a growing culture of social investment and impact investing. The UK has been a leader in the impact investing field, and the UK Government first commissioned a social investment taskforce back in 2010, and the second task force was launched in 2013 during the UK's presidency of the G8, which oversaw the setting aside of some £400 million of assets that were left in Dormant bank accounts to launch Big Society Capital, the world's first social investment bank.

It's not just happening here in the UK, as other countries are increasingly waking up to the opportunity that impact investing presents. Japan has committed $500 million a year from unclaimed assets to launch its own social investment bank, while the Brazilian government is developing a national policy for social finance and some of the world's biggest Asset Managers including BlackRock, Goldman Sachs, and Morgan Stanley have established dedicated impact investing platforms. A group of leading institutional investors in Europe with a combined $2.8 trillion under management have committed to investing in line with the SDGs and impact investing courses are now being taught at the world's leading business schools.

I believe that we are now approaching the 'tipping point' in the mainstreaming of impact into capital markets. A growing number of the largest pension funds and insurance companies are using impact as a central theme in their decision-making and again, 85 per cent of the young people surveyed say that they want to invest with purpose. Any investment managers who don't offer impact investments will be out of the running.

At the Co-op we have committed to investing an initial £20 million from the pension fund to support the construction of affordable homes and we want to do more in the future. We asked the pension scheme members if they would support this approach and there was an overwhelmingly positive response. Of course, the members thought it was a good idea – their children and grandchildren were finding it hard to purchase their first homes and to get on the housing ladder. If they could get a decent return for their pension, which they can, and help increase to stock of affordable homes why wouldn't they support it?

To create the ecosystem that can support the expansion of social enterprises and that can accelerate positive social, economic and environmental impact, we need to expand the market for their goods and services as well as providing access to finance. There is now a growing recognition that investing in organisations that have a social mission can deliver better value. Eighty one per cent of global consumers are expecting more from their expenditure than the simple acquisition of products and services. They want to know where the raw materials come from, how the goods are made, how the employees are rewarded and treated, and how the profits are used. Making positive impact can also attract and retain higher quality and more committed staff. Having a social purpose increases engagement, productivity and the retention of existing staff, reducing turnover of staff by 5 per cent can lead to a 25 per cent increase in profits.

At the Co-op we have 1000 apprentices. We pay them the full rate for the job, they have permanent contracts and can go on to study for degree level qualifications. This enhanced scheme costs the Co-op £17 million a year extra. Our data is already showing us that our apprentices stay with us longer, reducing first year churn, and are highly motivated to succeed.

This positive effect stands in marked contrast to the recent dramatic slide in share prices of those companies that have exploited workers by failing to pay the national minimum wage, continued with unsafe working conditions during the Covid-19 pandemic, and created environmentally unsustainable models of production. This is clear evidence that, in our modern world, doing bad is bad business!

Having a social purpose can also help to enhance the innovation pipeline. Product innovation can be expensive and risky with many innovations unable to reach scale or simply cannibalising existing products. The most successful innovators are finding that new products that are connected to a societal purpose are the ones that are driving top-line growth. Unilever's sustainable living brands accounted for half of the company's growth in 2014 and grew at twice the rate of the rest of the business.

However, Alan Jope, the CEO of Unilever, has issued a note of caution that simply stating your purpose is not enough. It has to be backed up by real evidence of commitment. He has highlighted the contribution that purpose has made to the success of brands such as Lifebuoy soap, Dove beauty products, and Domestos toilet cleaner, but these successes are backed up by major investment in global campaigns around health, hygiene and empowering women and girls. Authenticity and genuine commitment are essential in generating and retaining and loyalty of customers and colleagues.

Social Enterprises have always been at the forefront of innovation, they have mission locked into their structural form and they have colleagues who are committed to making positive impact in some of our most challenging communities. The rise of impact investing is making mainstream investment available to organisations with purpose and mission. Almost all of the pieces of the jigsaw are in place for us to drive a significant expansion of this business model.

The final piece of creating a sustainable market for the goods and services provided by social enterprises can be achieved by adopting a procurement with purpose model. In 2013 I worked with cross party colleagues to take through a piece of legislation in the UK Parliament which I believe has helped to transform the market in which social enterprises operate. The Act requires that when public money is being spent on goods and services, the commissioners must consider social, economic and environmental impact as well as value for money. No longer do we simply have to get the cheapest price for the provision of public services, but we must also take into account the impact that the suppliers can make. The Social Value Act is one of the smallest pieces of legislation I've ever helped through parliament, but potentially the most transformational.

In the UK, central government spends £280 billion every year on procuring goods and services for the public, using their own money paid through taxes. If we can obtain for the public, as well as the goods and services they need, benefits for their communities, then it is a win-win situation for everyone. We are now asking organisations to look very closely at who they employ, how they buy their goods and services, how they develop products to market, how they undertake their communications and marketing – ultimately every aspect of their business – and to see how they can improve the impact that they make.

This is now a major factor in determining who wins a public service contract. For many companies, having a collaborative partnership with a social enterprise is one of the best ways for them to achieve the requirements of this legislation.

Let us take look at who organisations employ. In many communities it's very difficult for people without conventional qualifications to obtain high quality employment. There are real difficulties in (re)joining the mainstream economy for ex-offenders, those who have had problems with drug and alcohol addiction, who those who been homeless and many others. By using public procurement in collaboration with social enterprises working in these areas, it is possible to achieve substantially improved outcomes for people in the most vulnerable parts of the labour market.

Every person who leaves prison in the UK and re offends costs the public purse £30,000 every year. By working intensively and imaginatively with social enterprises in our supply chain, we can ensure that that person is supported, motivated and encouraged to obrain qualifications, to get back into work, and to not reoffend. This provides a benefit to the individual but also a massive benefit to society, and increasingly we're finding that mainstream businesses are prepared to take some of that risk – but they need help. Social enterprises, with their specialised skills, their closeness to the issues, and their innovative approaches, can really help to deliver on some of the riskiest and most rewarding ventures.

When we first took the social value legislation through parliament, there were a number of enthusiastic early adopters in the UK, including companies with global reach such as Fujitsu, the construction company Balfour Beatty, Sodexo, who supply facilities management across the world, Unilever, Johnson and Johnson, Proctor and Gamble and many more companies involved in major infrastructure development.

The then Speaker of the House of Commons was persuaded to include in the contract for the refurbishment of the Palace of Westminster, which will cost approximately £10 billion over the next decade, to include clauses in the contract that the contractors must seek to maximise social, economic and environmental impact. My reason for doing this was that this new approach requires leadership, and if the government and the Houses of Parliament are prepared to include these requirements in their contracts, then other people would undoubtedly be encouraged to follow that lead.

Making this approach mainstream can be done. It takes bravery, intellect and evidence to combat those who say that this will just cost extra money, that it will be inefficient, and that it won't return value, but increasingly, people are demanding that we use their money to get a good deal but also to do good.

The Social Value legislation was initially directed towards public procurement and commissioning by central and local government, however it has now taken on a momentum of its own, and many private sector organisations, not just those tendering for public sector contracts, see the sense and the commercial opportunities available to them by operating their business in a different, more socially sustainable way. The challenge as always is how to make it easy for business to take a new approach.

Measuring the impact of your activities whichever sector you operate in is essential if you are to have insight into what you are achieving by making decisions about who you employ and how you procure goods and services in a more intentional way. Measurement and metrics have developed significantly over the last twenty years and it is now becoming a rather crowded field. It is important to develop some rigorous guidelines about the systems of measurement that represent best practice and the kinds of metrics we want to shift if this approach is to gain the confidence of all sectors.

Measurement of social value and impact should be applied to investment proposals in all sectors. A business case should include a social, economic and environmental impact assessment which would help determine whether the investment is a good use of resources. This approach should also be embedded into ongoing activity such as regarding hiring decisions and the procurement of goods and services.

There is a developing body of evidence around measurement and metrics that will allow businesses to be more transparent about the impact of their decisions, about who they employ, who is in their supply chain, and the overall impact they make in their mainstream business.

An organisation called Simetrica, whose motto is 'to help organisations be better at doing good', has built a Global Social Value Bank which can help assess the value that is being created by an entreprise. They place an emphasis on impact on wellbeing and quality of life which are sometimes seen as rather nebulous concepts, but concepts that can nonetheless be rigorously measured. Their methods are fully aligned to the Treasury Green Book Principles on Public Value which have been adopted in many countries across the world. One of the distinguishing features of their work is that they ask the public via large scale individual surveys what they value and use this data as an essential part of their work. After all, how are we to measure public value if we don't ask the public what they think is important?

There is a major shift taking place in what we as individuals think is important in our lives. The Covid-19 pandemic has revealed our vulnerabilities but has also uncovered our strengths in coping with an unprecedented threat to our health and wellbeing – at least in modern times. For many of us, the values of family and of community have become more important and working together through collaboration and partnership has revealed our solidarity with one another where we can achieve more together.

We now have an opportunity to reshape our economy to better reflect our values, and we should grasp it to create a system where business and communities work together to maximise our social value and impact. Some people will say this agenda ~~is~~ far too idealistic, but I believe that this will work if businesses can see the commercial advantages, that it makes economic sense and that it’s easy to operate. Doing good is good business we just have to keep going!

7. The public value of the nuclear industry in Caithness

Rick Wylie and Andrew van der Lem

In this chapter we explore the public value profiles of two facilities in Caithness, a remote and peripheral region of the far north of Scotland, at a time of change. We look at the assessment and interpretation of public value in the field, in the real world, and, by focusing on a public organisation, we can begin to understand and appreciate what this means in policy settings.

Public value focuses on the commonplace, the everyday lives of citizens and the mundane reality of their existence and how something, be it a project, policy programme or institution, provides value in that space. The essence of value is rooted in human needs and motives – how something is perceived by them as useful, relevant in their everyday reality. From the standpoint of a producer, public value has a spatial dimension in respect of who is a beneficiary of it (and this can be very broad indeed). Public value also has a temporal dimension in that it impacts upon individuals realising their high-order values to do with achievement, aspirations and ambitions for their futures which create a motivational dynamic within their daily lives.

A defining characteristic of public value is its indirect nature: one does not have to purchase the service or products associated with an organisation to be touched by its consequences. For an organisation, as we shall see, these consequences may be diffuse, unforeseen and, for their recipients, profound in their implication but the public value outcomes will always be rooted in fundamental human values which are themselves related to underpinning needs and motivations.

Public value is essentially the realisation of outcomes associated with a referent, in this case a complex organisation and a large project in the nuclear sector. Following Meynhardt (2009, 2015) public value is identified as being perceived by members of the public who are affected by the sometimes unforeseen and unintended consequences of the outputs and activities of a referent (in this case two facilities). Public value essentially comprises positive externalities associated with the outputs of a policy, project or programme, such as the delivery of a contract or service.

In this chapter we examine the value that two nuclear related facilities have among the communities of Caithness using surveys in which we ask selected respondents whether they believe that these facilities create outcomes that are consistent with a widely used set of human value categories. This study assesses the beliefs of two groups of reasonable, informed citizens, about the value contribution perceived as being made by these facilities, one over time in successive stages of its lifecycle, and another at the beginning of its implementation.

This study therefore has a spatial and a temporal dimension. Spatially, we define the public sphere in respect of this study as the Caithness area, asking respondents specifically about the impact upon their community. We also have a temporal dimension to this study in the construction of the Dounreay questionnaire which asked respondents to focus upon three timescales in respect of their perceptions of the contribution to the area of Dounreay – past, present and future.

The nuclear industry in Caithness

This case study of the nuclear industry gives an insight into the public value associated with a major publicly funded and owned facility, the Dounreay nuclear facility which has, for over 60 years, provided public value to that community. The Dounreay nuclear complex is in Caithness, a remote region in the far north of Scotland which is an area that is heavily dependent on that industry.

The site was originally set up as the Dounreay Nuclear Power Development Establishment and operated by the UK Atomic Energy Authority. Its purpose was to develop fast breeder nuclear reactors, a new type of technology at the time, which it was thought had the potential to create electricity without generating nuclear waste. Dounreay was the UK centre for research and development of fast breeder reactor technology, which was a consequence of decisions made in the early 1950s to move quickly from a research programme to the construction of new reactors.

The requirements for the site was that, it should be:

- on the coast, where cooling water could be drawn from and returned to the ocean;
- at a sufficient height above sea level to avoid tidal or wind-driven surges;
- on what was felt to be a suitable rock formation; and
- more than five miles from any centre of population greater than 2,500 people.

An additional de facto requirement seems to have been that the site should be “available”, which probably meant that it would already be in public ownership and/or use.

Decisions were also taken in the 1950s to make Dounreay an integrated site, in other words, that the final fabrication of nuclear fuel elements and for the chemical separation of irradiated material would be built on the same site as the reactor and managed as part of an integral operation. As a result, Dounreay became a significant facility, rather than being merely an outpost of larger research facilities in the UK (eg Harwell or Windscale).

In 1954 the UK Government selected the site of a former Admiralty airfield as the location for the national centre for research and development of fast breeder reactors, a new type of atomic energy.

As the Minister at the time said, *"An enterprise of this kind requires a large site of some hundreds of acres, in open country but within reach of a labour supply and the amenities of community life. It must be on the coast, both for the discharge of effluent and to provide sea water for cooling; and it also needs a very large fresh water supply. Dounreay meets all these requirements better than any other site that has been found; and it has the further merit that development on this site should make a big contribution to the economic welfare of this part of the Highlands. When in full operation the project is expected to provide employment for some 600 people, of whom about half will be recruited locally. The plant will, for safety, be housed in a large spherical steel shell. Even so, there is a very remote possibility of a slight leakage of radioactivity, in the event of a failure of certain parts of the plant. The local authorities have been consulted and arrangements are being made with their co-operation as to what should be done in this most unlikely event.*

In a pioneer enterprise of this kind, it is, of course, never quite certain what new problems will be encountered. Nevertheless, the government have every hope that this fast reactor will show us the way to remarkable economies in uranium consumption, and that it will become the prototype of a kind of plant which will provide electricity in the next generation".

The interest in the 1950s in fast reactors was because they were thought to have good potential for electricity generation as they made more efficient use of uranium fuel – effectively "breeding" more fuel than they consumed. This was considered important in light of the scarcity of uranium at the time.

The site was opened in 1955 and initially comprised the Dounreay Materials Test Reactor (DMTR) followed by the Dounreay Fast Reactor (DFR) with its characteristic "golf ball" containment building, and facilities for fuel manufacture, reprocessing and waste storage.

The DMTR was designed to test the effects of radiation on metals. It operated from 1958 until 1969, when it was shut down after encountering technical problems and the construction of an alternative facility at Harwell in Oxfordshire. The DFR operated from 1959 until 1977, first supplying electricity to the national grid in 1962. The reactor was operated using enriched uranium metal fuel, with experimental rigs containing plutonium fuel, and it generated 15 MW of electricity.

A second fast reactor, the PFR, or Prototype Fast Reactor, operated from 1974 until 1994. It is a pool type sodium-cooled reactor designed to generate 250 MW of electricity – enough to power the needs of a medium sized town such as Aberdeen. It used fuel comprising a plutonium and natural or depleted uranium oxide mixture. The PFR was conceived as a development facility capable of contributing electricity to the grid whilst providing information to assist with the design, construction and operation of future large commercial fast reactors. During the 1970s and 1980s Dounreay employed 2,400 people.

However, by the late 1980s the uranium supply picture had changed with the discovery of considerable natural reserves. The UK Government decided that there was no short-term need for fast reactor electricity generation, and the research and development programme was run down and finally terminated in 1994.

In 1988, the Energy Minister, Cecil Parkinson, said *"The government have carried out a review of the [Dounreay] programme in the light of the expectation that commercial deployment of fast reactors in the United Kingdom will not now be required for 30 to 40 years. Our overall aim in the review has been to retain a position in the technology for the United Kingdom at economic cost. In considering the programme, we have also had firmly in mind the importance of Dounreay to the Caithness economy, and the contribution of the people of Caithness to the development of the fast reactor"*.

Sir David Robertson, the then MP for Caithness and Sutherland, fought for the Fast Reactor project to come to Dounreay in order to halt the economic decline of Caithness following the demise of the fishing industry. Fifty years on the wheel has turned full circle and the concern is similar: what will replace Dounreay? In the intervening period Caithness and Sutherland have undergone considerable change, in part due to the presence of Dounreay and in part due to the natural march of progress. Thurso, and to a lesser extent Wick, have become company towns and the original 'atomics' have been integrated into the community.

The Dounreay site is now owned and managed by the Nuclear Decommissioning Authority (NDA) on behalf of the UK Government. Throughout its existence the impact of Dounreay percolates into all aspects of the community and the economy. Indeed, much of the expansion of the community especially around Thurso (the closest town) was caused directly by the nuclear industry and its demand for skilled workers who, with their families, moved into the area to settle.

The construction years were a period of immense activity in a quiet farming area of Caithness. For workers involved in construction, 'camp' living arrangements were typical, but the experimental nature of the site and its unusual features and the sheer remoteness of the area made the experience stand out. The camp is still remembered locally by those that lived and worked there, as well as further afield by workers who stayed there during construction.

Those that came to live in these estates were known as the 'Atomics'. Local mythology cites a Thurso milk company's account books for the name; when they had to open a new book for the new residents, they reputedly wrote "Locals" on the cover of the old one and "Atomics" on the new. The impact was more than just residential. Young families boosted the school intake and extra facilities had to be planned for and constructed as the population of Thurso rapidly rose from circa 3,300 to circa 9,000 between 1954 and 1964. The mix of local and 'atomic' families was largely smooth. Dounreay was seen as a boon for the local economy, and many local people benefited from employment and training opportunities at the site.

This study takes place in a time of transition as the nuclear industry, which formerly dominated this area economically socially and economically, is declining, albeit only slowly. For almost 20 years the Dounreay complex has been in a stage of being decommissioned and dismantled and in less than two decades the site will be largely gone. Part of the socioeconomic solution is the development and operation of a national nuclear archive – dubbed the Nucleus archive – nearby which also houses a local history archive associated with Caithness. In this chapter, we focus upon Dounreay and then the Nucleus archive in that wider context.

The Dounreay Facility

The Dounreay facility dominated the Caithness area since the 1950s and continues to do so today. From a public value standpoint, it is seen to provide outcomes relevent to all major categories of human values. The physical and intellectual nature of Dounreay has changed. It is no longer an experimental research establishment concerned with the production of nuclear energy. Today the purpose of Dounreay is almost reversed as the plant is decommissioned. The long-term programme began in 2000 with the development of a fully integrated site decommissioning programme and the removal of many of the original 1950s and subsequent buildings and structures, and the construction of new facilities to deal with radioactive waste material, both liquor and solids. A number of the original 1950s buildings and the majority of the airfield buildings (3 airfield facilities remain in a refurbished form) have been removed to make way for new facilities and to clear space for future developments.

The decommissioning function does not mean that Dounreay is now a quiet place that is slowly being taken apart. The ongoing decommissioning work means that it remains a busy and vibrant place with around 2,000 workers. Dounreay remains important for the continued prosperity of Caithness, north Sutherland and northern Scotland. It is a major employer, helping the towns of Thurso and Wick, as well as outlying villages, to overcome the decline in traditional sources of income, such as the farming, fishing and flagstone industries.

However, the Caithness area faces significant economic and social change as a consequence of Dounreay's closure and ongoing decommissioning

The NDA is a non-departmental public body of the Department for Business, Energy and Industrial Strategy, formed by the Energy Act 2004. It evolved from the Coal and Nuclear Liabilities Unit of the Department of Trade and Industry and was set up to manage the liabilities at the UK's historic nuclear sites – 17 sites in all, including old nuclear power stations and research facilities. Dounreay remains the second largest and most complex of the NDA's sites. The trajectory of the NDA is one of decommissioning and dismantling to end states in which levels of manpower and resources decline to almost zero and this is made very clear in the NDA strategy:

"The ultimate goal for our mission is to achieve the end state of all sites by 2125" (NDA Strategy April 2016). The Dounreay site being the first with an end state achieved by 2030-35...".

At Dounreay in Caithness, the NDA work in collaboration and within contractual relationships with a number of players. Until recently, the NDA has used a 'Parent Body Organisation' model to decommission its site. This means that it contracts out the management of the site to the private sector – in the case of Dounreay, to the Cavendish Dounreay Partnership (CDP). CDP is a consortium made up of Cavendish Nuclear, Ademtum and Jacobs. CDP manage Dounreay Site Restoration Ltd, or the Site Licence Company. This is the company regulated to manage the Dounreay nuclear site which employs the majority of the staff on the site and leases the land at Dourneay from the NDA. The model is often used in the nuclear industry, as it means there is an enduring legal entity response for site operations and safety. The NDA has recently announced a simplification of this model, making Dounreay Site Restoration Ltd a direct subsidiary of the NDA.

The NDA has had a socioeconomic aspect to its mission the narrative of which is very much one of employment as the NDA does its best to replace the jobs lost as it pursues its key objective.

"The risk to local communities around our sites is that they become overly dependent on NDA-funded decommissioning work. Success for our socio-economic strategy is therefore a reduction on this level of dependency. Communities near our sites should not be reliant purely on the NDA's decommissioning work and should not face a cliff-edge when decommissioning work comes to an end..." (NDA Socioeconomic strategy update 2020).

"In the next 10-20 years, for example, we expect decommissioning at Dounreay to draw to a close, therefore we need a particular focus on supporting the Caithness economy as it adapts. We also have an obligation to our workforce, by supporting retraining and other opportunities" (NDA Socioeconomic strategy update 2020).

However, the NDA recognises the wider value associated with its activities and at a conference on public value organised by the Applied Policy Science Unit in May 2019 Paul Vallance Director of communications and stakeholder relations at the NDA said: *"Public value is our core business"* which they defined as *"The value that an organisation contributes to society" then the NDA has public value at its core. It's why we were established". (Vallance 2019)*

As part of its socioeconomic policy (consistent with the Energy Act of 2004) the NDA undertook some socioeconomic measures in the vicinity of Dounreay. A very significant policy initiative is its construction of the national nuclear archive (called Nucleus) in the town of Wick, some 20 miles from Dounreay. There is, therefore, a clear imperative for public value in the NDA. It is, as Paul Vallance said, at their very core. But how to measure public value contribution and what is the public value of the nuclear industry and the NDA's activities in Caithness and what is the public value 'account' of the ebb and flow of the nuclear industry in Caithness? Those are the key questions we address in this chapter.

The study

Collaborating with the NDA and the DSSG UCLan's Applied Policy Science Unit undertook a public value appraisal of the Dounreay facility to give a public value 'profile' of that facility over its lifecycle and looking ahead to the years after its decommissioning. This then led to a profile of the associated Nucleus Caithness and nuclear archive at Wick which was created as a socioeconomic initiative by the NDA.

To re-cap, we regard the values of the human value frameworks being used here (Schwartz, Alderfer, Inglehart, Maslow etc) as, in effect, *public* values in that they all claim to provide a comprehensive spectrum of the totality of human values by category, though individuals will of course prioritise them to a greater or lesser extent and will manifest their possession of values within these broad categories in different ways. The value set is universal, but the priority in that set is unique to individuals (though with varying degrees of similarity among groups). Moreover, it is argued that all citizens recognise them and will see their wider applicability and relevance. This value set is universal, recognised and appreciated across all publics and in Caithness, the Dounreay and Nucleus facilities are perceived to provide value in all of these areas (to a greater or lesser extent) and as such it has a significant and substantial public value profile which is made all the more important given the context of the decline of the Dounreay facility.

This case study explores the public value profiles as perceived by individuals as representatives of the local community who were members of the Dounreay Site Stakeholder Group (DSSG) and the Dounreay HR department. The Dounreay case study was undertaken in collaboration with the DSSG which is an especially appropriate group to engage with in this public value research given its representation and public-facing nature and agenda. The DSSG is a forum in which community representatives review the site's performance and engage in a dialogue with the industry and its regulators through which they reflect the views of the local population. The group was formed in 2005 as part of the commitment of the NDA to establish stakeholder groups around each of its sites. Today, the NDA provides the DSSG an annual budget of £30,000 and a secretariat through the site operators, Dounreay Site Restoration Limited.

This study was progressed with the DSSG whose collaboration led to this project being framed in a manner consistent with the community agenda in Caithness and the DSSG's own strategic and tactical objectives. The first stage of this project was a series of conversations with the DSSG socioeconomic subgroup, chair and secretariat – and the NDA. During these conversations the key dimensions of scope and scale of the public value contribution of the Dounreay facility emerged. From these conversations, three issues emerged as being the most salient associated with public value relevant to DSSG:

- The first was the impact of the contribution of Dounreay site to the Caithness area;
- The second was the change over time as the site went through three key stages in its life;
- The third were the implications of change for the future of the region as perceived through a public value lens.

Three questions associated with this public value survey that emerged from these conversations were:

- That Dounreay is perceived as providing value in all categories;

- That this may have changed over time, and already as the site is being decommissioned;
- That the future prospects for Caithness in respect of the facility's contribution to public value may be significant, especially with regard to the longevity of the community.

In the conversations the breadth of public value perceived as being associated with Dounreay in respect of the categories was explored. From these conversations it was clear that the DSSG felt that all key categories of public value associated with basic human needs (which may be summarised in respect of the domains of existence, relationships and growth) were associated with Dounreay. Over the years it was felt that Dounreay has provided the Caithness area with a full measure of value. Today, however the key question was how this had developed over time, and what was the prognosis for the future.

For this study we wanted to acquire a picture of the entire gamut of human needs, motives and values against which the public value outcomes of Dounreay could be assessed. We needed to use a research approach that would identify changes in the public value contribution made by Dounreay over three stages in its perceived lifecycle. And would give an insight into the implications of the Dounreay facility in the future. The research approach we used was to construct a series of propositions which probed perception of the value contribution of Dounreay against a widely accepted set of value categories. We were especially interested in three stages in the development of Dounreay in the Caithness area which we defined as the 'public sphere' in this project. The three stages were:

- firstly, a retrospective look at the period from the 1950s-1990s, at the leading edge of nuclear science and fast reactor research;
- secondly, a view of the current contribution, in the extant 'decommissioning' phase from the mid 1990s , since government announced the end of fast reactor research and the last reactor being shut down at the site in 1994, marking the transition from operations to decommissioning. This phase is expected to continue to the mid-2030s; and
- thirdly, a prospective assessment of the public value contribution of Dounreay in the 'post-closure' period, that is, after around 2033, when all significant work will have ended and when most facilities will be decommissioned and demolished with only a small handful of workers remaining (such as security and monitoring activities). This third stage is aimed to focus on the aspirational aspects of the facility.

Essentially, we wanted to identify the public value *outcomes* associated with the scientific, technical and commercial *outputs* produced by the Dounreay facility over the years. To achieve this we created a survey to probe perceptions of public value among the Caithness 'public'. For the purposes of this research we constructed a 'public' in the form of a group of reasonable, informed citizens who could reflect the public view as individuals that are resident in Caithness and independent members of the Dounreay Stakeholder Group and members of staff of the Dounreay organisation itself who were located in the Caithness area. This analysis is based (following Meynhardt, 2009) on the idea that if something may be said to create public value then this perception must move from the perception of members of the public and that the assessment must be based upon an extant and theorised ontology or conceptual framework of human values/motives/needs. In addition, the 'public' needs to be defined in respect of the benefit or value relationship with the referent (in this case Dounreay). If a public may be defined as those who are affected by the, often indirect, consequences of the referent, then the scope of the public for the study will give a particular perspective or colour to the results. For this study we define the 'public' as those living within the Caithness area.

Our evaluation in Caithness is based upon the perceptions of reasonable, informed citizens – members of the DSSG and a group of local employees in the Personnel department of the Dounreay facility, most of whom were resident locally and were members of the local community.

The research approach

The research instrument was a questionnaire tailored to the hard *outputs* of Dounreay which had a public value *outcome* potential and the study was focused upon perceptions of these 'softer' public value outcomes. Following a discussion with DSSG it was decided to focus upon four assessment frames: firstly, a general overall assessment of perception of public value; secondly an assessment of its early years as a leading edge nuclear research facility at the forefront of nuclear science and technology; thirdly in its current phase of the decommissioning of the facility; and finally in a future, post-closure phase.

To assess the public value contribution associated with Dounreay, we use a methodological approach centred upon a questionnaire containing propositions tapping a recognised set of the totality of human value domains (see below) then, against each, we give an illustration of a value contribution in respect of a particular, related output produced by Dounreay. The questionnaire probed five categories of human value which drew heavily upon Maslow (1954, 1970a and b). We framed the questions to focus upon five key categories of human needs, namely:

- shelter and existence
- safety and viability
- relations and relationships
- esteem
- self-realisation

These value sets may be arranged in an ascending order with the most fundamental being those associated with physiological sustenance and safety which prioritise economic growth and physical security. Beyond these are psychological needs associated with relations, relationships and esteem. At the apex are those associated with achieving one's potential in respect of creativity, embracing ambition and reflecting the dynamism and trajectory of individual ambition and aspiration.

Summarising, these groups can be arranged into firstly, ‘lower order’ values associated with physiological existence, safety and security (1-2 below), or the so-called ‘material’ values, and secondly into what have been termed ‘higher order’ values (3-5 below), associated with psychological needs associated with relationships, status and esteem, (3-4) and the high order with the so-called ‘postmaterial’ value set associated with achieving one’s potential, the self-fulfilment needs (5).

In more detail these categories of needs are as follows:

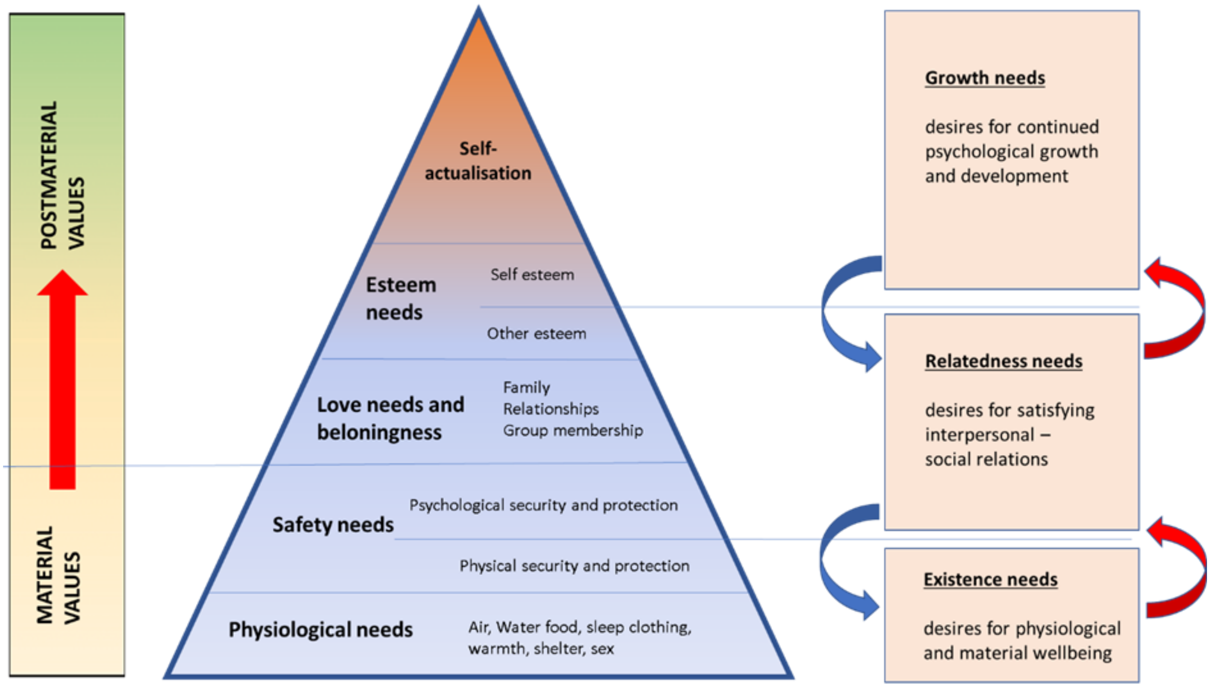
1. Physiological Needs – These needs are the basic needs, a prerequisite for the survival of the human being. Air, water, food, sleep are the physiological needs which must be met, in order to go further in the hierarchy. If these needs are not met, then an individual will be highly motivated to satisfy these first, while the other levels of needs would provide him with a little motivation.
2. Safety Needs – Once the physiological or basic needs are fulfilled, the other needs become important. The next comes the safety or security needs. People begin to feel the need for a safer place to live in, i.e. shelter, a safe neighbourhood, steady employment, etc. Thus, at this stage, the need for self-preservation i.e. a need for being free of physical danger, emerges.
3. Social Needs – After the first two needs of the hierarchy are met, people tend to move further and seek to satisfy their social needs. Since a human being is a social animal who lives in a society, there is an urge to belong to and be accepted. The need for love, affection and belonging emerges at this stage, and relationships are formed at this level.
4. Esteem Needs – Once the above needs are fulfilled, an individual strives to achieve esteem needs, concerned with self-respect, self-confidence, a feeling of being unique, social recognition, personal worth etc. On the satisfaction of these needs, an individual feels a sense of power and control and becomes more confident.
5. Self-Actualization Needs – The next and final need on Maslow’s need hierarchy is the self-actualization need, which refers to the need to maximize one’s potential. These needs are related to the development of one’s intrinsic capabilities that can be utilized in different real-life situations. It can be rephrased as a desire to become what one is capable of becoming.

Following Alderfer’s ‘Existence-Relatedness-Growth’ categorisation (discussed in chapter 2) categories 1 and 2 above fall into the ‘Existence’; category 3 comprises the ‘Relationship’ category; and 4 and 5 falls into Alderfer’s ‘Growth’ category.

Conceptually, the three related underpinning theories (Alderfer, Inglehart and Maslow) that we use in this analysis all have a progression dynamic to them, and these related theories and approaches may be represented diagrammatically as is set out below.

Figure 7.1: Diagram mapping relationship between value categories associated with three value theories. Inglehart’s ‘Postmaterialism’ thesis, Alderfers ‘Existence, Relatedness and Growth’ vramework and Mslows ‘Hierarchy of needs’ (shown in its five principal category

form. Diagram shows the convergence between these theories centred around Maslow's hierarchy.



To re-cap from chapter two, the theories of Inglehart (1990), Alderfer (1969) and Maslow (for example 1970 a and b, 1954) give an overview of value categories and orientations based on a similar conceptual 'core'. Maslow's original framework was a theorised hierarchy of motivational needs arranged in a hierarchy of five needs categories from which he aimed to cover the entire gamut of human motivations. Crucially, a motivation by deprivation was the driver of this hierarchy (Taormina and Gow 2013) in which the pull of the unsatisfied need creates a desire for its fulfilment.

The logic of the hierarchy was also a key part of the Inglehart theory of postmaterialism (see chapter two for a fuller discussion) which related value orientation to socio-economic context. The logic of the hierarchy was that individuals would be motivated to acquire these needs in order of what were termed physiological needs at the bottom of the hierarchy associated with basic resources and security, to higher 'being' needs associated with *"…enjoying life, doing what one wants, living life fully, and gratifying one's own wishes"* (Maslow 1962).

Inglehart (1990) drew upon the Maslovian model in his theorisation that prevailing socioeconomic conditions influenced individual value orientations through socialisation and that these changing value orientations to higher order priorities (shown on the diagram above as consistent with the 'Relatedness' and 'Growth' categories of Alderfer and the 'Belongingness', 'Esteem' and 'Actualisation' needs of Maslow) were shaping people's political and policy orientations.

As shown above, Alderfer proposed a three-fold conception of human needs (1969) and we use these for brevity's sake in much or our discussion below. Alderfer proposed this theory based on the results of empirical studies to explain the relationship between the satisfaction of needs and human desires. His theory, has been confirmed by further empirical study (see Robbins and Judge, 2008; Schneider and Alderfer, 1973) and this approach is based upon three categories of needs, namely: existence needs, relatedness needs, and growth needs. For this study, the importance of the realisation of growth needs is well expressed by Yang et al (2011) as follows…

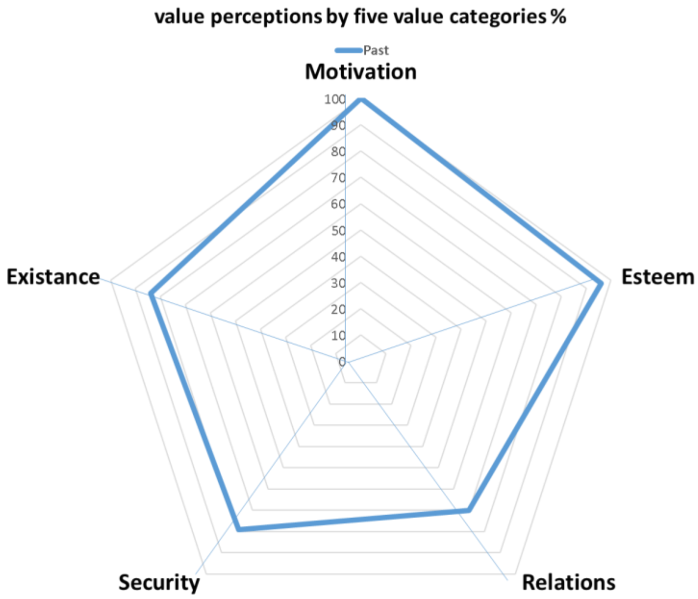
"Growth needs involve needs for self esteem and self actualization. The need for self esteem refers to self-productive effects such as the ability to pursue, to seek knowledge, to achieve, to control, to build confidence, to be independent and to feel competent. Self actualization refers to self-accomplishments including achieving an individual's goals and developing his or her personality. The abilities to realize one's potentials and to support the growth of others are also included" (Yang, Hwang and Chen 2011).

The propositions used beliefs about Dounreay's outputs over the years placed with beliefs about the achievement of valued outcomes in the community, in the public sphere of Caithness.

What we were measuring here is the contribution of the Dounreay facility over the years as perceived by reasonable, informed citizens, to public value in Caithness. Following our conversations with the DSSG we were especially interested in changes in the perceived public value contribution made by the Dounreay facility over the years in three successive stages – past, present and future.

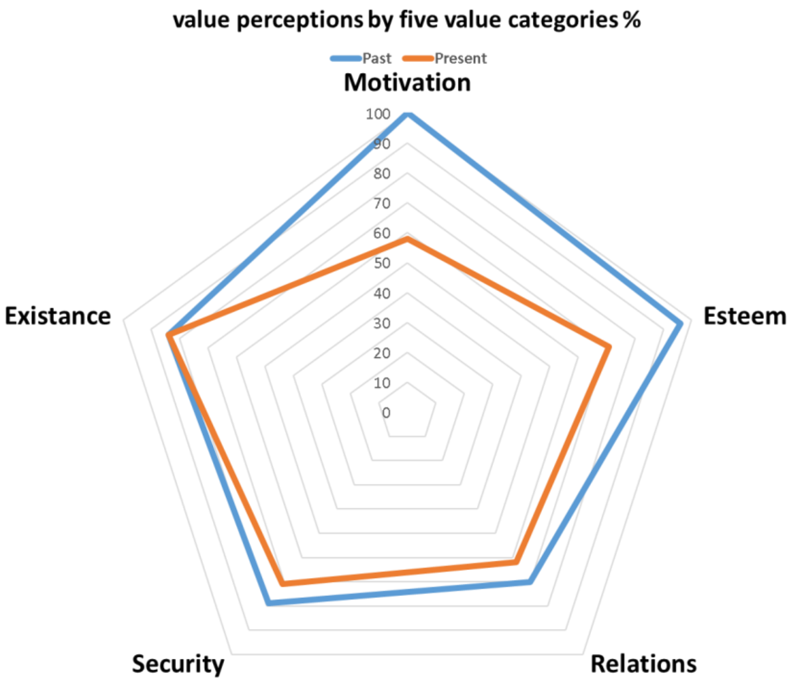
The following analysis is based upon the results of the 'agree' and 'strongly agree' responses for the five value/need categories derived from Maslow. The summary score for 'agree' and 'agree strongly' responses made in each of the five categories is plotted on a 'radar' diagram from the Microsoft Excel package, one for each of the past, present and future stages in Dounreay's evolution.

Figure 7.2: Plot of summarised Agree and agree strongly responses to each of Maslow's Needs categories in the early years of its operation



The first radar diagram plots ‘agree’ and ‘strongly agree’ responses to each of the five categories against each of the five axes scaled 0-100 per cent. From this diagram the high level of perceived public value associated with the Dounreay facility in its early years is revealed. This retrospective look at the facility in its heyday suggests the depth of the public value contribution to Caithness. Two points are especially interesting. Firstly, that the aggregate motivation score reached 100 per cent and that the relations score was relatively the lowest in any category (though still a significant majority). We turn now to the results of the Dounreay evaluation in the current ‘decommissioning’ period.

Figure 7.3: Plot of summarised Agree and agree strongly responses to each of Maslow’s Needs categories in the current phase of its operation



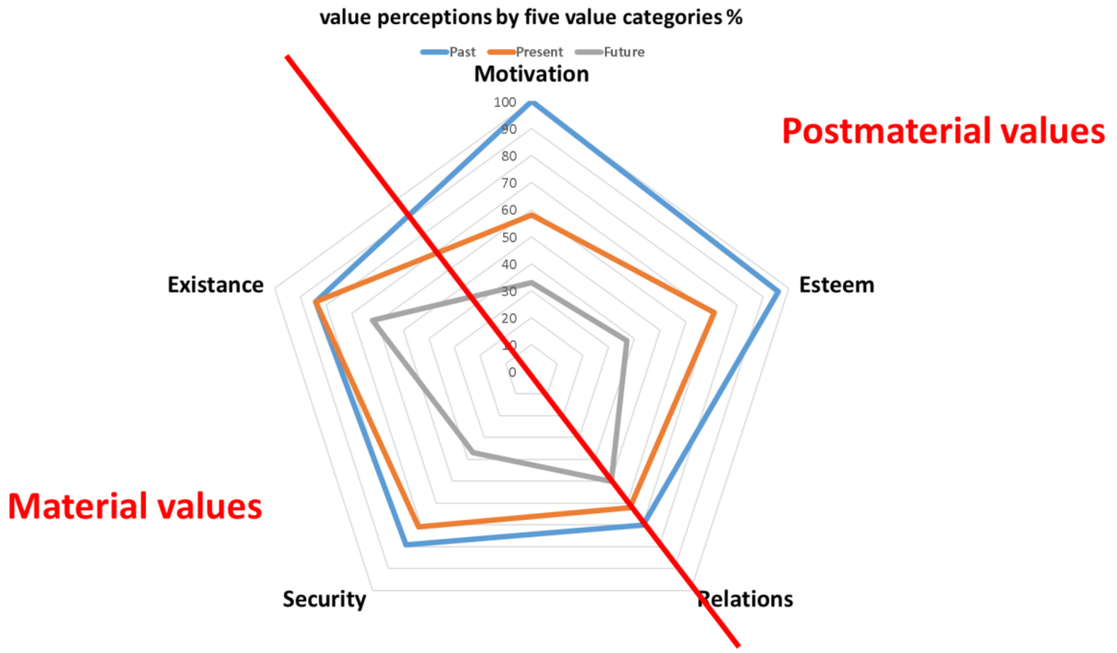
The above diagram shows values contributions associated with the present time reflecting the current ‘decommissioning’ era. Though all scores are lower than in the early years, we see that a majority of respondents ‘agree’ or ‘agree strongly’ that Dounreay makes a positive contribution in all value categories.

The existence category of responses remains high, as there are still a lot of well-paid jobs there in decommissioning activities and the economic activity associated with the site is still very significant. Security, relations and esteem are not hugely changed. The significant change here was that the motivation element of this was seen to be much diminished. Perhaps this reveals the lack of excitement and aspiration inherent in the current decommissioning activity at Dounreay – and the closure of the programme with its finitude and specified end state.

Finally, we turn to the prognosis for the future value contribution made by Dounreay to the Caithness area and the provision of outputs associated with the realisation of valued outcomes in the public sphere. In this projected future, Dounreay has been dismantled and decommissioned, and is no longer at the cutting edge of fast reactor research, but is just another decommissioning site along with many others in the UK and across the world and it may be that this perception may be affecting perceptions of the prestige associated with the Caithness area as a whole.

The following diagram maps the future perceptions on to the chart alongside the past and present era perception data. It also highlights the difference between the material and postmaterial value categories (after Inglehart 1971, 1990, 1999) with the former associated with existence and personal security and with the latter (so-called higher order values) associated with relationships, growth and freedom of expression.

Figure 7.4: Plot of summarised Agree and agree strongly responses to each of Maslow's Needs categories in the future post-closure phase after the site is fully decommissioned Diagram also highlights the Maslovian categories in the material and postmaterial value ranges.



So, what's going to happen in the future? This is of course asking about something which has not yet happened, and a lot can change over the next 15 years. The perception of respondents was that the delivery of value is perceived as likely to be much diminished from its past and present phases. Looking at the difference in the shapes of the graphs and the decline in past-material values is interesting, with motivation and esteem down significantly. Security is also down, which is not surprising as if the jobs and income are gone, the stability of the community is at risk. Relations was one particularly interesting finding, which saw a reduction albeit not a massive one. One of the things that the area has got is a very strong sense of community, but distant from the political and administrative centres of power with their council headquarters some 120 miles away in Inverness and Edinburgh being the best part of a day driving or a flight. Another thing they have, and which acts as a forum for airing and getting attention for issues of relevance to the area, is the site stakeholder group. This will likely cease when the site goes in the 2030's but there was hope that that type of group would continue, and that there would be some relational element involved in the community.

For the future, regarding the Caithness area, the implication of these findings is that the realisation of higher order values in the past and to a lesser extent the present could have helped make Caithness a 'sticky place' for high achievers and the ambitious by providing value into the future. The implication being that if the Dounreay facility does not provide these valued motivational goods, then, in an absence of other significant opportunities, they will look for them elsewhere. Clearly, the provision of valued motivationally compliant high order growth opportunities will be important for the future of Caithness. This informs the NDA's socio-economic work – with large scale projects to support green energy and create value from local ports. There is also potential for Sutherland to be involved in the space sector as it is a suitable location for small space launchers.

These findings reveal the breadth of the perceived public value contribution of Dounreay during an era in the 1950's to the 1990's in which Caithness was at the leading edge of nuclear science. At that time, the facility made a massive contribution to higher order value categories of esteem and motivation. There was a bright technological future and Caithness was part of it. Caithness was, in effect, a 'happening place', and this is reflected in the value scores labelled 'past' below. At that time, Dounreay was indeed part of the future providing motivational and actualisation value in the public sphere. Responses to the 'past' value categories give all categories high scores – especially those associated with growth needs or 'postmaterial' values of esteem and motivation. In these future-orientated categories the Dounreay site receives particularly high scores, a totality (100 per cent) for motivation, in fact.

Figure 7.5: Perceived value contributions made into the public sphere by the activities at Dounreay

Value category	Past	Present	Future	per cent difference between Past and Future
Existence	84	84	62	-22
Safety	79	71	37	-42
Relations	70	62	50	-20
Esteem	96	71	37	-59
Motivation	100	58	33	-96

Thinking of values and needs associated with a 'postmaterial' worldview we see that the esteem and motivation value categories were awarded the highest scores in respect of the perceived value contribution of Dounreay, these categories tapping values associated with a ‘postmaterial’ worldview. In those early years, ‘Relations’ received the still substantial but lowest score, perhaps reflecting the activities of the site at the time and the *modus operandi* of nuclear facilities operated by the then Atomic Energy Authority with little or no engagement or consultation with the general public nationally.

Respondents generally made the assumption that there would be a post closure support package for the area and that a group like the DSSG would continue to exist, providing a form and network of policy relations within and between Caithness and other communities and interests. In all other value categories, the data reveal that only a minority of respondents agreed with the propositions relating to security, to motivation and to esteem. The ‘postmaterial’ value categories were well down on past and present category responses with only around one-third of respondents not agreeing with associated propositions.

this public value investigation reveals the contribution of Dounreay to the Caithness community with value extending far beyond economic outcomes and infrastructure improvements and extending into domains beyond those associated with employees, clients or consumers.

What is revealing is the respondents’ perception of difference between the early years and the current period. Though the material values in the domain of shelter and existence is higher in the present, the ‘postmaterial’ values associated with esteem and self-realisation associated with the prestige of a world-leading, home-grown nuclear facility (and its impact upon aspirations locally) being perceived to be somewhat diminished as the site is dismantled and decommissioned.

Clearly, for the future the responses to this growth need value category are key as in this study they reveal perceptions that the area has a relevance to individual futures in respect of development and motivation. This may be contrasted with perceptions of growth needs in the future. In respect of a comparison between past and present, what is most revealing is the assessment of the value group relations. This group comprises relations between individuals and institutions higher scores for relational activities. This may reveal the importance of the enormous amount of work of the site and its stakeholder group and stakeholders in providing a voice and a forum for the community in Caithness to engage in and for the site to engage with issues of wider relevance and concern to the community. This activity may be all the more important due to the decline in other mechanisms for the public to engage with issues and institutions locally.

In review, the survey data above reveal that, in all value domains, the future of the Dounreay site in its post-closure ‘legacy’ period is significantly different from the current period of decommissioning. In all but one of the value domains, the risks associated with the legacy future strongly outweigh the benefits and have resulted in a strongly negative score.

Clearly, this is an enormous change and it reveals how the negative impact of the site closure in respect of public value is not merely in the socioeconomic arena, but extends across the higher-order relational, esteem and self-realisation domains. Just highlighting some of the key points from each period, starting with the past, one can see that the area under that radar diagram plot is massive, with some categories right out at 100 per cent, such as ‘motivation’. The clear indication here is that there is a huge perceived value in all categories for that first phase, from the fundamentals of existence, providing good jobs, security and wealth, right through to esteem, living in the north east of Scotland and at the world leading edge of nuclear science. There was something in the area had a vibrancy – something to be proud of.

What this investigation has revealed is the loss of public value associated with the closure of a facility like Dounreay, which was embedded in the community and was fundamental to the economic, cultural and social lives of the local public. The data reveal and reflect the massive impact that the closure of Dounreay will have upon the public of Caithness.

Nucleus, the Nuclear and Caithness Archive

We turn now to a major policy initiative in Caithness that was created by the NDA as part of its policy of addressing some of the social and economic – and ultimately public value – issues caused by the closure of Dounreay.

As discussed, as part of its socioeconomic agenda in one of its defined ‘nuclear communities’ the NDA has created the Nucleus archive, a state-of-the-art archive facility for the UK’s civil nuclear industry some 25 miles from Dounreay near the town of Wick. This national facility houses literally tonnes of documentation including some artefacts of a non-nuclear nature relating to the civil nuclear sites in the UK. Nucleus also houses the North Highland Council’s North Highland Archive facility.

The NDA owns all the documentation associated with its nuclear estate and for regulatory and governance reasons the NDA is required to keep this extensive body of non-military material. Of national importance the operational life of this facility extends beyond the end of this century as it contains information on radioactive material composition, storage and technology associated with its manufacture.

Vast numbers of civil nuclear records, plans, photographs, drawings and other important data and information, some dating back to the beginning of the UK nuclear industry, are currently stored in locations across the country. Some are held at NDA sites and others by a variety of commercial organisations. Very few of these collections, however, are managed to the standards required of the NDA as a public authority; some are even stored in buildings that are scheduled for demolition.

The NDA embarked upon the project to find a single UK home for all the relevant material in 2005, following a careful evaluation of the options and costs. As part of its socio-economic remit, the NDA focused the search for a suitable site within 4 priority regions – areas where ageing nuclear sites have long been a dominant influence in the local economy and where site closures will have the greatest local impact.

Caithness, with 2,000 people working on the decommissioning of the site, was selected as the region most likely to benefit. The closure of its major employer, Dounreay, is set to happen by 2030. Nucleus located near Wick Airport, Caithness, not far from the Dounreay site, and is built to all relevant UK archive standards.

The doors opened at the nuclear archive building in February 2017. Dounreay's records were the first to be transferred, including almost a third of a million photographs and 200 tonnes of documents. Material from the other 16 sites will be moved in gradually, in a programme expected to take at least five years. Sellafield Ltd alone has more than 80,000 boxes of archived records in off-site storage, plus material on site and in various offices that is estimated as stretching, if laid out, to more than 120km worth of paperwork. Magnox Ltd, with 12 sites, has a similar-sized collection in storage.

In the longer term, a searchable Archive Management System will provide online access to the material, however security restrictions will apply to certain categories of records. This is one of the reasons that the Dounreay site is so suitable for this type of facility.

The NDA's aim is to develop Nucleus as a base for training archivists and to offer apprenticeships, linking up with the University of the Highlands and Islands and North Highland College. Much of the information will eventually be digitised and made available for online access.

The facility also provides a permanent home for the existing North Highland archive which had outgrown its previous location above the Wick library. This archive is a popular attraction for visitors seeking information about Scottish heritage and genealogy. The NDA hopes that the Nucleus archives will help sustain and add to the level of interest in local history as well as in the history of the UK nuclear industry.

The public were involved in the process of designing the archive, and the building has many innovative and low impact design features. The site plan and building plan maximises the use of daylight while minimising the impact of the prevailing wind and the orientation of the building, as well as the relationship between the archive block and low-level public and ancillary accommodation, are key to the sustainable approach of the design's passive heating and ventilation systems, which help to minimise mechanical solutions. The project is a flexible solution which allows the archive building to accommodate change over its lifetime, and it is designed to ensure the long-term durability of the building, as materials were selected to a robust specification appropriate to the hostile weather conditions encountered locally. The building includes rainwater harvesting and water saving features, and low carbon emissions are achieved by a passive-design approach, excellent daylighting and energy efficient services that create an energy performance rating of B+ and a 20 per cent reduction in energy consumption compared with conventional new constructions. The site uses low carbon biomass heating and the internal lighting will maximise the use of low energy fittings which maintain a good efficiency and excellent light quality while supplementing daylight levels and external lighting is being developed to limit light pollution and to eliminate glare. Performance-based thermal comfort has been developed through advanced modelling and steps have been taken during the construction process to reduce environmental impact. A bird-nesting survey was carried out at the start of the works to ensure works were not impacting on any species and eco-cabins have been used to limit impact on the environment.

No excavated material has been removed from the site and a range of socially and economically sustainable measures have been achieved throughout the decommissioning process. Morrison Construction has employed four permanent local staff members for the duration of the project, with a site administrator, a gateman and two Operatives, as well as two local trainees, with a trainee site manager and a trainee administrator as well as two local apprentice joiners.

The Pulteneytown Peoples Project Programme is an 11-week work placement for local individuals interested in construction. In terms of the supply chain there are twelve apprenticeships with GandA Barnie, John Gunn and Sons and Metalwork UK as well as a summer placement scheme with John Gunn and Sons. Ten local companies have been employed to date, including John Gunn and Sons Ltd, G and A Barnie Group Ltd, Steve Blackwood, Caithness Flagstone Ltd, Allan Gow Groundworks Ltd, Allan Ingram, Petrie Painters, Metalwork UK (Tain), Pat Munro (Alness), and GMR Henderson Builders Limited.

Regarding the community, there have been several stakeholder visits, including from North Highland College, Engineering and Construction students, participation in Caithness Safe Highlander events with local schools, a donation of £100 to RSPB for nesting birds and a 'Learning Through Work Week' to promote awareness of careers in construction. Football strips were provided for Noss Primary School in Wick, and goody bags to P7 pupils moving up to secondary school as well as assistance with the Green Flag Eco-Schools initiative. Portaloos were provided for school sports day and a donation of work boots was made to the school nursery classes for painting and assisting with their planting and growing project and Morrison Construction even made Mud Kitchens out of old pallets for the school. For Wick Harbour Day, Morrison Construction made stalls and shelters and sponsored the Wick Lifeboat Station stall and helped with SOS Fundraising, providing a challenge and materials which helped raise over £700. Morrison Construction also assisted the local police force at their Speed Awareness Day.

In 2018 the then managing Director of the NDA Archives approached APSU, on learning of our public value work at Dounreay, and asked if we were able to undertake a baseline assessment of the public value associated with the Nucleus facility and to position that in the context of the findings of the Dounreay results. The policy context of strategic initiatives in the socio-economic environment is revealed in an NDA Strategy Impact Assessment document (2016):

"[The] operation of new facilities would support jobs of various types, including specialist nuclear engineering and managerial positions in addition to general plant operation and maintenance roles. For some options, knowledge and skills which could be of national benefit may be developed, while education and training may be required to implement others".

Clearly, the Nucleus development must be seen in in this policy context. The Strategy Impact Assessment Document goes on to say:

"The closure of facilities may lead to a number of socio-economic effects, including potential loss of employment, knowledge, skills and in some cases national assets. However, the closure of facilities and other activities which facilitate decommissioning of a site may also free up land for alternative uses. If this land can be divested, it may become a local asset, potentially providing some form of environmental, economic or community benefit".

(NDA 2016 Strategy Impact Assessment Report Vol 1 Main Report Final)

The Nucleus archive facility also includes the family and historical archive of the Caithness area which was included in this archive by the NDA as part of the project's original design brief, to provide added value, and utilisation, of the facility. Ultimately, therefore, the Nucleus facility was constructed with wider-than-economic value in mind as part of the project's aims. But what are these wider values? Little consideration was given to the actual value delivered or values addressed at the time, other than it would make a non-nuclear contribution to the economy of the local community over many years at a time of (otherwise) decline.

This case study addresses the issue of the importance of a wider value perspective and the impact of a project upon individuals in their community setting and their daily lives. In this project we interviewed a range of staff and stakeholders to identify key issues with the development and operation of the facility. Fifteen individuals were involved in these conversations, about one third of whom worked at the Nucleus facility while the other two thirds were involved with the facility as a user of its archive services

The conversations with staff and stakeholders revealed the significant public value potential in respect of the outputs and aims of the Nucleus facility. The site has a national role, but it also has an important local role associated with the archive of the Caithness community, and also the nuclear archive of the Dounreay facility itself which has a strong association with the community of Caithness and is a key part of its recent history with many families moving into Caithness to work at the facility. Moreover, in the locality the facility is perceived as making a contribution to the fabric of the area at a time of recession and decline, this in addition to its role as a secure archive facility for nuclear records and some archives (though not, it should be stressed, any radioactive materials).

What also emerged from these discussions was that the facility's objectives and the attitudes and activities of the staff contained significant public values in respect of the policies and practice of the facility and an orientation among individual members of staff to achieve public value.

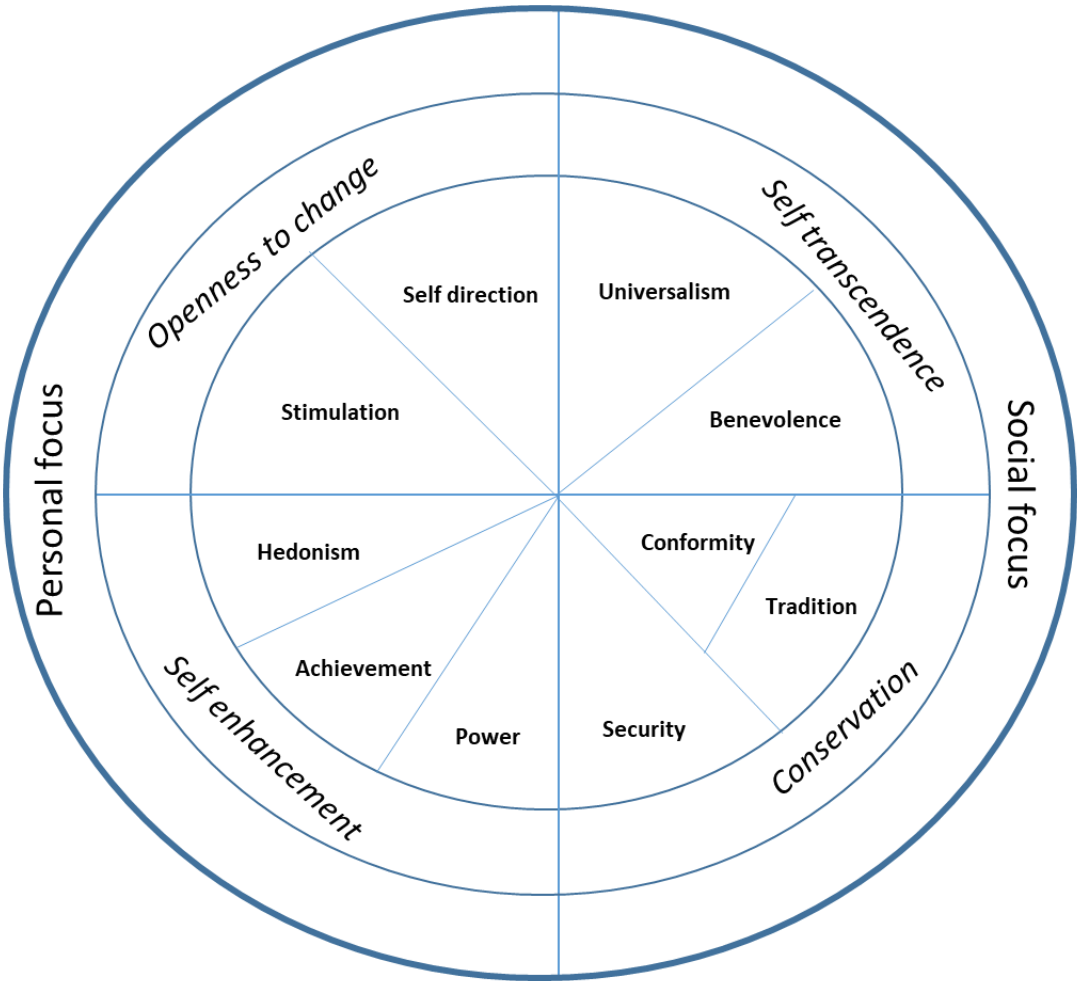
To create a data set and an outcome of practical use to the NDA, we used the Schwartz model of ten value categories. As discussed earlier, this theory, which is based upon key underlying motives, was approached in the same way as the Dounreay study reported above. A series of conversations was held with staff and stakeholders, to assess the appropriate outcomes of the Nucleus facility which were related with the ten value categories detailed below. The results of these conversations allowed the researchers to construct a series of propositions that combined a belief about the outcomes of the activities of Nucleus which tapped perceptions of the contribution of Nucleus to the public sphere of Caithness and the UK.

In an online survey based on the Schwartz framework, we asked respondents to consider the contribution made by Nucleus to the local community in the Caithness ‘public sphere’, which is essentially the same area as that covered by the Dounreay study in order to facilitate a comparison. By responding to ten propositions regarding the contribution of Nucleus locally, those interviewed assessed the contribution of the facility to all value categories on the Schwartz ten element value circle. From this we are able to judge the public value profile of the Nucleus facility in Caithness

The goal of this research is to assess the perceived impact of the Nucleus facility on the delivery of outcomes associated with the realisation of value in the public sphere. It became clear from the interviews that all categories of human values could reasonably be seen to be addressed by Nucleus, even in its first couple of years of operation and there appeared to be few value categories which were not addressed by Nucleus. In order to assess this, we used a comprehensive approach to human value categories as the underpinning ontology in this survey.

We looked at the human value elements associated with Nucleus using the Schwartz ten element category value model to assess beliefs about the outputs and outcomes perceived as being associated with Nucleus. From the discussion in the previous chapters, a key element of the usefulness of the Schwartz model is that it gives us an insight into the entire gamut of human values and allows in its interpretation to be read in respect of value categories associated with various dimensions of the human experience. We used elements of the Schwartz 10 category ‘Value circle’ as a framework for a battery of propositions to tap perceptions of the value contribution made by the Nucleus facility specifically in the Caithness area.

Figure 7.6: Rendering of the Schwartz values circle showing 10 value categories, with four second order summary categories (Openness to change, Self transcendence, Conservation and Self-enhancement) and two third order categories (Personal and social focus) After Schwartz 2012.



Broadly, these categories may be summarised as follows, along with their underlying motivations.

Firstly, self enhancement values emphasise the pursuit of one's own interests and relative success and dominance over others, and include elements of:

- Power, including social status and prestige, control or dominance over people and resources, authority, wealth, and preserving public image;
- Achievement, including personal success through demonstrating competence according to social standards, and being successful, capable, ambitious, and influential;
- Hedonism, including pleasure and sensuous gratification for oneself, and enjoying life.

Secondly, openness to change values that emphasise independence of thought, action, and feelings and readiness for change, and include elements of:

- Stimulation, and feelings of excitement, novelty, a varied and exciting life;

- Self-direction, independent thought and action-choosing, and creating, exploring, being creative, free, independent, curious, and choosing one's own goals;
- Hedonism, pursuing pleasure and sensuous gratification for oneself.

Thirdly, self-transcendence values that emphasise concern for the welfare and interests of others, and include elements of:

- Universalism, understanding, appreciation, tolerance and protection for the welfare of all people and for nature. This includes the promotion of broadmindedness, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, and protecting the environment;
- Benevolence and the preservation and enhancement of the welfare of people with whom one is in frequent personal contact with. This involves being helpful, honest, forgiving, loyal, and responsible.

Fourthly, conservation values that emphasise order and self-restriction, and include elements of:

- Tradition, involving respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide;
- Security, involving safety, harmony and stability of society, of relationships, and of self. This might involve family security, national security, social order, and the reciprocation of favours, and being humble, accepting my portion in life, being devout, having respect for tradition, and being moderate;
- Conformity, involving restraint of any actions, inclinations and impulses that likely to upset or harm others and violate social expectations or norms. This can involve politeness, obedience, self-discipline, and honouring parents and elders.

Using the Schwartz motivational value set allows the analysis to provide a comprehensive public value profile for the Nucleus facility. The survey comprised 10 propositions (from the above value categories, one of which (Hedonism) could be interpreted across two second order value categories framed in a battery of propositions which comprise firstly, a belief about an aspect of the Nucleus operation, and secondly a value component. In sum this battery of propositions tapped all of the above value categories to assess respondents' beliefs about whether Nucleus produced an outcome consistent with that value category in the public sphere of Caithness.

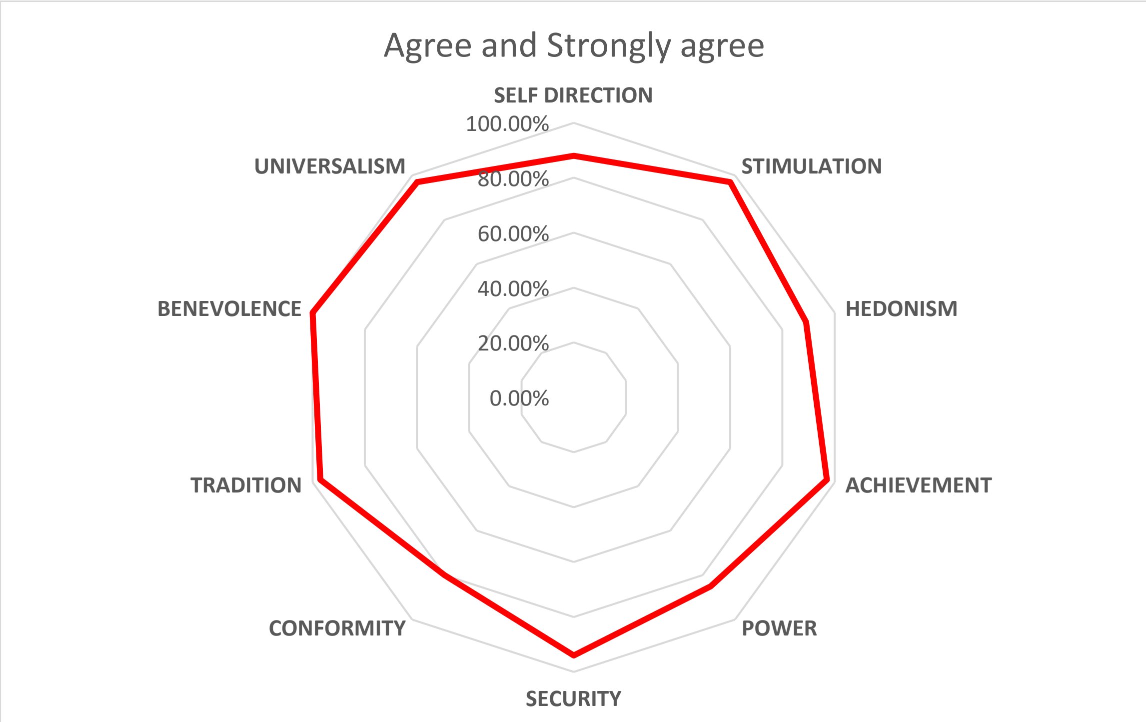
From a series of interviews with staff from the NDA and the operating company (Highlife Highland) the key activities and contributions made by Nucleus were identified which allowed us to frame a series of hybrid propositions which reflected the activity of Nucleus (and the opportunity it presents to realise value) in the community consistent with each of the Schwartz categories. As the table below shows, in all categories a majority indicated 'agree' or 'strongly agree' with the propositions.

Figure 7.7: NDA Nucleus value profile based upon the Schwartz 10 category framework. Research by UCLan APSU in 2018-2019.

	Strongly disagree	**Disagree**	**Neither**	**Agree**	**Strongly agree**
SELF DIRECTION	0.00 per cent	2.94 per cent	8.82 per cent	50.00 per cent	38.24 per cent
STIMULATION	0.00 per cent	2.94 per cent	0.00 per cent	44.12 per cent	52.94 per cent
HEDONISM	0.00 per cent	2.94 per cent	8.82 per cent	11.76 per cent	76.47 per cent
ACHIEVEMENT	0.00 per cent	2.94 per cent	0.00 per cent	29.41 per cent	67.65 per cent
POWER	0.00 per cent	14.71 per cent	0.00 per cent	17.65 per cent	67.65 per cent
SECURITY	0.00 per cent	0.00 per cent	5.88 per cent	17.65 per cent	76.47 per cent
CONFORMITY	2.94 per cent	5.88 per cent	11.76 per cent	50.00 per cent	29.41 per cent
TRADITION	0.00 per cent	0.00 per cent	2.94 per cent	23.53 per cent	73.53 per cent
BENEVOLENCE	0.00 per cent	0.00 per cent	0.00 per cent	32.35 per cent	67.65 per cent
UNIVERSALISM	0.00 per cent	0.00 per cent	2.94 per cent	38.24 per cent	58.82 per cent

The results of the survey revealed that in all value categories the Nucleus facility is perceived as providing value to the public sphere as perceived by the group of reasonable, informed citizens surveyed in person and online.

Figure 7.8: Radar diagram Plotting the combined ‘agree’ and ‘strongly agree’ responses given above



The radar diagram showing the combined ‘Agree’ and ‘Agree strongly’ responses for all of the value categories reveals the overwhelmingly positive finding, when compared with the responses in figure 7.4 above for the Dounreay facility made using the same technique but with fewer value categories. The Nucleus facility provides a similar profile to that of the Dounreay facility in its early days, creating a public value contribution to the public sphere in all areas. Crucially, this includes the higher-order values in the ‘postmaterial’ category associated with growth into the future as the Nucleus facility develops and expands in the future. In respect of the Schwartz value categories the postmaterial value set includes the Universalism, stimulation and self-direction categories, all of which receive positive scores.

These results have to be considered in context. Nucleus is going to be around for many years, and possibly centuries given the national importance of the nuclear documentation it contains. This longevity must be seen in the context of the nuclear industry more widely in Scotland where locally the Dounreay facility has a little over a decade left as a significant employment site and Scottish government policy is specifically against new nuclear projects.

In this context the development of Nucleus amounts to a very significant contribution to the public sphere and to individual lives. Consequently, for the NDA and for government, there is a significant potential for framing and messaging for Nucleus in that context.

Full consideration of public value helps the NDA operate a facility that seems to be highly valued by the local public. It should also mean that as the facility evolves, the NDA will remain attuned to public value considerations in the round and therefore will seek to maximise the value of the asset it has created. The public value approach means that the NDA has found a number of new ways of looking at its investment and as a result created something with high levels of community acceptance and support.

Conclusion

The findings reveal the fundamental nature of the relationship between the Dounreay site and the public sphere of Caithness. In all five value dimensions, from the most basic level of socioeconomic shelter and existence up to the higher levels of esteem and motivation, the embedded nature of the Dounreay project in Caithness and its positive impact upon the public sphere is clear.

What is also clear from these findings is the perception that the public value of the Dounreay nuclear site is that the facility was perceived as having made a contribution well beyond a purely economic one to the public sphere in the north of Scotland, at least it was perceived to be so by the group interviewed. Key areas probed include the legitimacy of the activity, its impact on prestige and status, its opportunities in progression of the area and its role in motivation and providing a voice for individuals in the community. In all of these value areas, the data revealed a significant perceived contribution and, hence, public value.

In all of the Maslovian human need domains, perception of the contribution of Dounreay were seen to be significant, especially in its early years when the site was at the leading edge of nuclear science and when the whole thrust of Dounreay was about progress and ambition with a contribution to a future seen at individual and community levels. However, over time and through the successive stages in the evolution of the Dounreay site, based upon historical recollections and a projection into a future that is by no means certain, the perceived public value profile of the Dounreay site is, from the evidence of this survey, significantly changing.

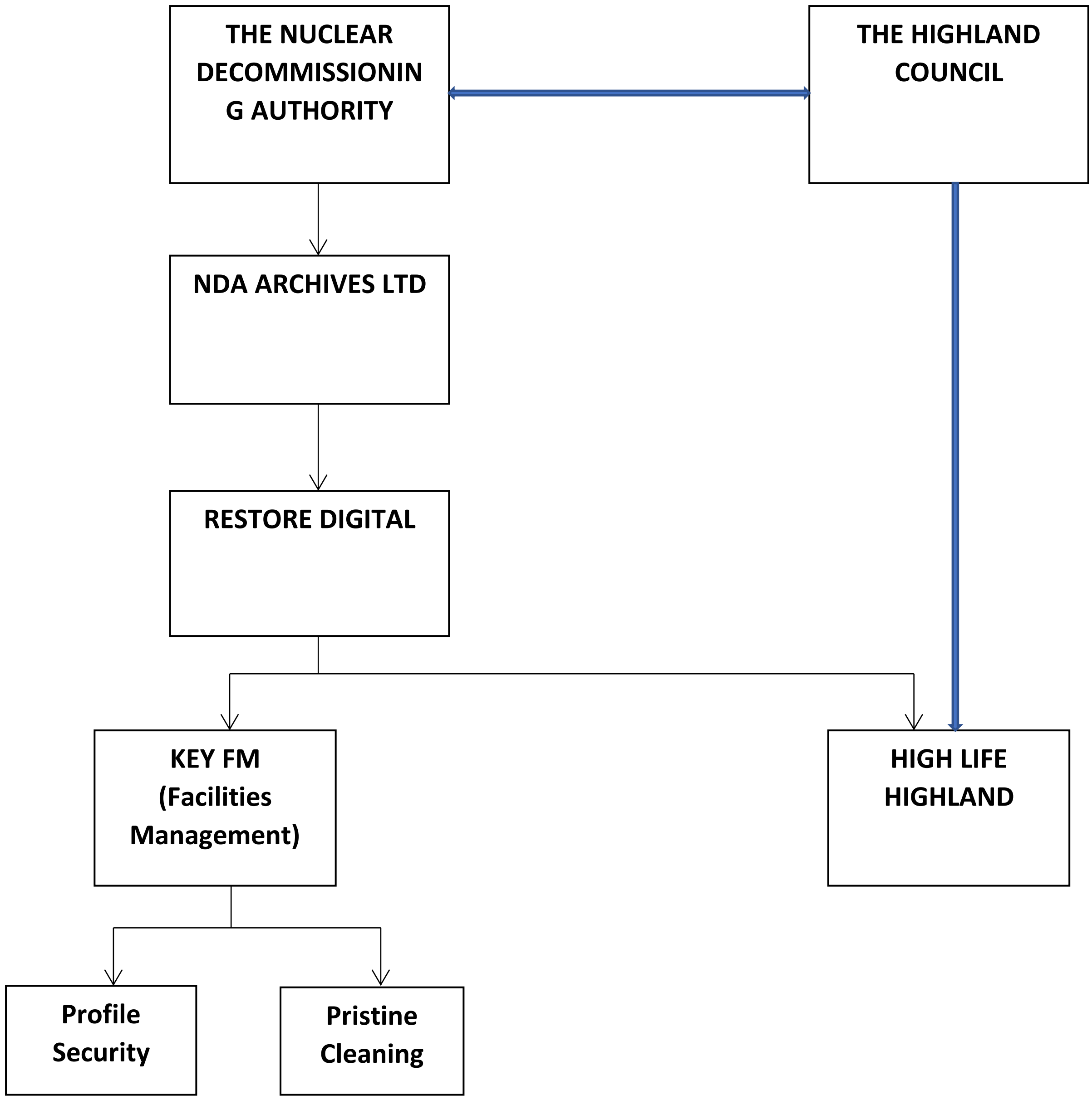
Perhaps the most striking evidence of change is in the decline of the so-called higher order value domains associated with self-actualisation and esteem. The progressive decline of perceived public value accruing from the site is very evident. The results of this survey show graphically the decline in the scope and scale of public value associated with the Dounreay site and suggest the need for future policy interventions.

In keeping with this, we set out with three objectives in this project. Firstly, to identify the public value profile of Dounreay; secondly, to assess whether the changing activities at Doureay associated with key stages in its lifecycle would be reflected in the public value approach; thirdly, to focus upon the perceived future of Caithness post-Dounreay, and to ascertain whether this approach and analysis would be revealing about this; and finally, to consider the public value contribution of the Nucleus facility in this context, especially for the future.

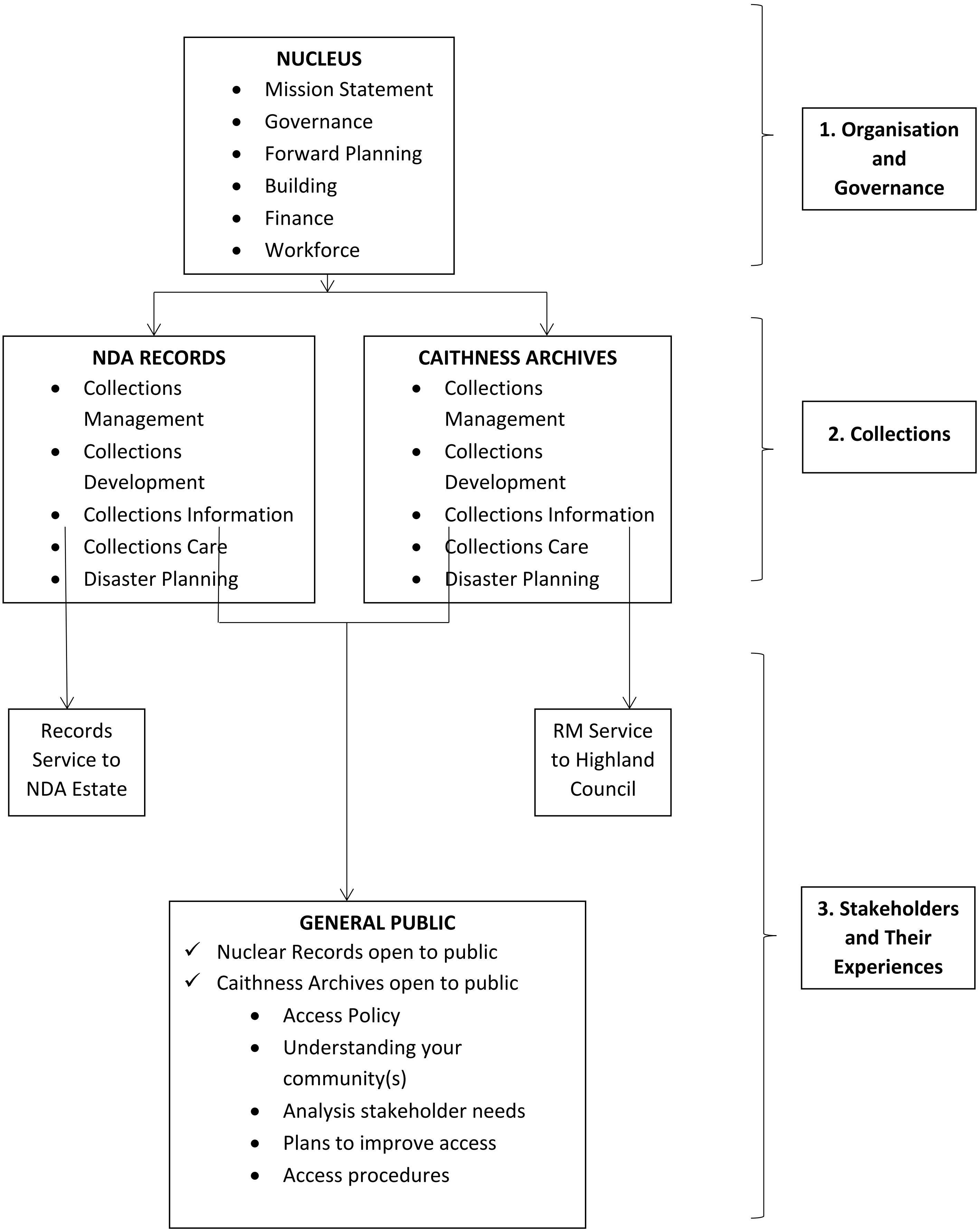
A public value profile approach proved sufficiently sensitive to reveal changes in the value contribution of the Dounreay nuclear facility from its heyday at the leading edge of nuclear science to its post-closure future, and to highlight the public value contribution being made by the Nucleus archive facility in that context. In all value categories the Dounreay facility was perceived by respondents as providing significant public value in respect of all value categories. Over the decades the Dounreay facility is perceived to have made contributions existence through relational values associated with community and society, and to higher order postmaterial values associated with esteem, prestige and self-realisation. Essentially, Dounreay has, since its inception in the 1950s, made a significant public value contribution to Caithness and, from the evidence of this study, will continue to do so in the future – albeit with less certainty as to the policy future in that area. However, as the facility declines in the future, its perceived contribution to public value is seen to diminish significantly as the economic and scientific activity diminish as the research shows over successive stages of the site’s lifecycle. Relative to the site’s heyday, the perceived future public value contribution of the site’s non-nuclear legacy post-closure is understandably much less significant, though it is still perceived as extant, perhaps due to a belief that there would be a ‘post-closure’ support package for the community. In the context of decline over successive phases of the Dounreay facility the ‘growth’ and ‘postmaterial’ categories of values suffer the greatest perceived decline and this must surely have implications for the longevity of the community and the aspirations and ambitions of the young and mobile in the community.

In this context the creation of the Nucleus facility must be seen as an extremely positive development. The research revealed a high level of public value that is perceived as being associated with the facility in all categories. Clearly, Nucleus is seen as making a very significant contribution to the public sphere in Caithness consistent with the NDA’s policy intentions.

APPENDIX 1: NUCLEUS GOVERNANCE AND MANAGEMENT RELATIONSHIPS



APPENDIX 2 – NUCLEUS AND THE ARCHIVE SERVICE ACCREDITATION



8. The National Nuclear Laboratory

Rick Wylie and Phill Bearman

Introduction

A public value perspective provides organisations with unique insights into their relationship with the public sphere, and with citizens living their lives within that space. It gives a wider view of the contribution an organisation makes to society beyond financial efficiency. As discussed in Chapter 2, public value is about the perceptions of informed citizens in relation to their beliefs about the public sphere, and how it may provide them with benefits consistent with their basic needs. For the development of this project, we take into account the context within which the organisation, in this case the National Nuclear Lab (NNL), is located.

In organisations in the public, private and social sectors, managers are increasingly confronting the need to articulate the value of their activities to the wider society – and to justify the value and the benefits which accrue from their activities to citizens. At the same time, the public is being brought into policy communities in new, dialogic structures of co-production and the co-design of policies and projects in which human, public values are the currency of the wider political economy.

The turn to public value as a mode of public administration represents a new way of assessing and appraising public value. A reaction against the commercial and consumer focus of new public management (NPM), (Stoker 2006) public value management is not just about doing things better. It is about whether an organisation is doing the right things at all. To assess this requires the engagement of the public in the decision-making process. For managers, there is an imperative to understand what the public perception is of their organisation, and to develop a language and a lexicon by which public demands and motivations can be understood and against which their policy, project or programme can be positioned and tested.

This project with NNL may be seen in this light as the organisation seeks, for the first time, to evaluate itself from a wider-than-financial value perspective drawing upon human needs and values as a basis for that evaluation. Dr Paul Howarth, CEO of the National Nuclear Laboratory said:

"The value to the public of science and technology goes way beyond the basic monetary measures of cost and return on investment and impacts so many other areas in the public sphere, and its right that science and technology and particularly nuclear, and its contribution to public value is considered in this way. I'm delighted that we're working more closely with colleagues at UCLan and the Samuel Lindow Foundation to better understand the value that nuclear brings to the public and also to extend this work to achieve a greater

appreciation of energy economics as we move forward with nuclear power as a key part of the wider energy mix."

From the standpoint of an organisation like NNL, public value gives a wider appreciation of its contribution to society and gives the organisation a defensible currency within its authorising environment. Public value provides a linkage between the public and private through a wider appreciation of the fit between an organisation, its outputs and the perceived effect of the outcomes of that organisation on citizens and society.

National Nuclear Laboratory

The National Nuclear Laboratory (NNL) is a UK Government owned and operated nuclear services technology provider covering the whole of the nuclear fuel cycle. Unlike other national laboratories, the NNL is fully customer-funded and operates at six locations in the United Kingdom. Its customers include the Nuclear Decommissioning Authority (NDA), Sellafield Limited (SL), the Ministry of Defence (MOD), Westinghouse and EDF Energy among others. It also has extensive links with academia, both in the UK and abroad and collaborates on a variety of scientific areas in various fields such as waste treatment and immobilisation and nuclear materials research. Since the 1940s, NNL and is predecessor organisations have been innovating in the nuclear sector, indeed the founding fathers of today's organisation were pioneers of atomic science and technology development and the NNL has been involved in every generation of nuclear technology since.

In order to understand NNL's view of public value and its importance, its necessary to appreciate NNL's journey as an organisation and the integral role it played contributing to public value related to the nuclear sector throughout its history. Charting NNL's history begins with the formation of the United Kingdom Atomic Energy Authority (UKAEA), which was formed in 1954 from the Ministry of Supply, Department of Atomic Energy, and inherited its facilities and most of its personnel on its formation. Responsible for the UK's entire nuclear program, both civil and defence, it made pioneering developments in fission based nuclear power, overseeing the development of nuclear technology and performing much scientific research.

Following the Atomic Energy Authority Act in 1971, the authority was demergered into three organisations, with only the research activities remaining with the original authority: The Radiochemical Centre Limited, later becoming Amersham plc, focused on production of medical and industrial radioisotopes, while the production division became the newly formed British Nuclear Fuels Ltd (BNFL) taking over production of nuclear fuel with operations based at Springfields (fuel manufacture), Capenhurst (enrichment), Windscale – later Sellafield (spent-fuel management and reprocessing) and Calder Hall and Chapelcross power stations (electricity generation and plutonium production).

In 1984, BNFL became a public limited company as British Nuclear Fuels plc, wholly owned by the UK Government. With a growing recognition for the importance of science and technology across the various parts of the business, BNFL eventually consolidated most of the cross-site research and development capability, establishing a Research and Technology (RandT) division in 1996. Two years later Magnox Electric was merged into BNFL, becoming BNFL Magnox Generation and soon after, the Berkeley Nuclear Laboratories were closed and most of the scientific and technical services, along with a proportion of the staff, were transferred into BNFL RandT.

Under continued government ownership BNFL expanded its operations becoming known as a nuclear energy and fuels company, manufacturing Advanced Gas cooled Reactor (AGR) fuel and later Mixed Oxide (MOX) fuel, operated reactors, generated and sold electricity, reprocessed and managed spent fuel, and decommissioned nuclear plants and other similar facilities, and acquired Westinghouse Electric Company along the way. In 2003 AEAT Nuclear Engineering, formed from the transfer of the more commercial parts of UKAEA as part of the Atomic Energy Authority Act 1995, was acquired by BNFL RandT. This larger organisation subsequently rebranded to ready the business for transformation into a fully commercial entity and became Nuclear Sciences and Technology Services (NSTS).

In 2004, as a consequence of the Energy Act, government established the Nuclear Decommissioning Authority (NDA) as a non-departmental public body, whose purpose, was to safely and cost effectively deliver the decommissioning and clean-up of the UK's civil nuclear legacy. On 1 April 2005 when the NDA officially took up its main function, the nuclear industry was significantly restructured with BNFL transferring all its nuclear licensed sites to the Authority. British Nuclear Fuels plc then became British Nuclear Group (BNG) and a new holding company was established, adopting the British Nuclear Fuels plc name and discharging its operations mainly through its subsidiaries. These subsidiaries were now Westinghouse, BNG and NSTS. NSTS subsequently rebranded as Nexia Solutions in the same year, becoming a fully commercially managed nuclear science and technology business – the forerunner of what is today NNL.

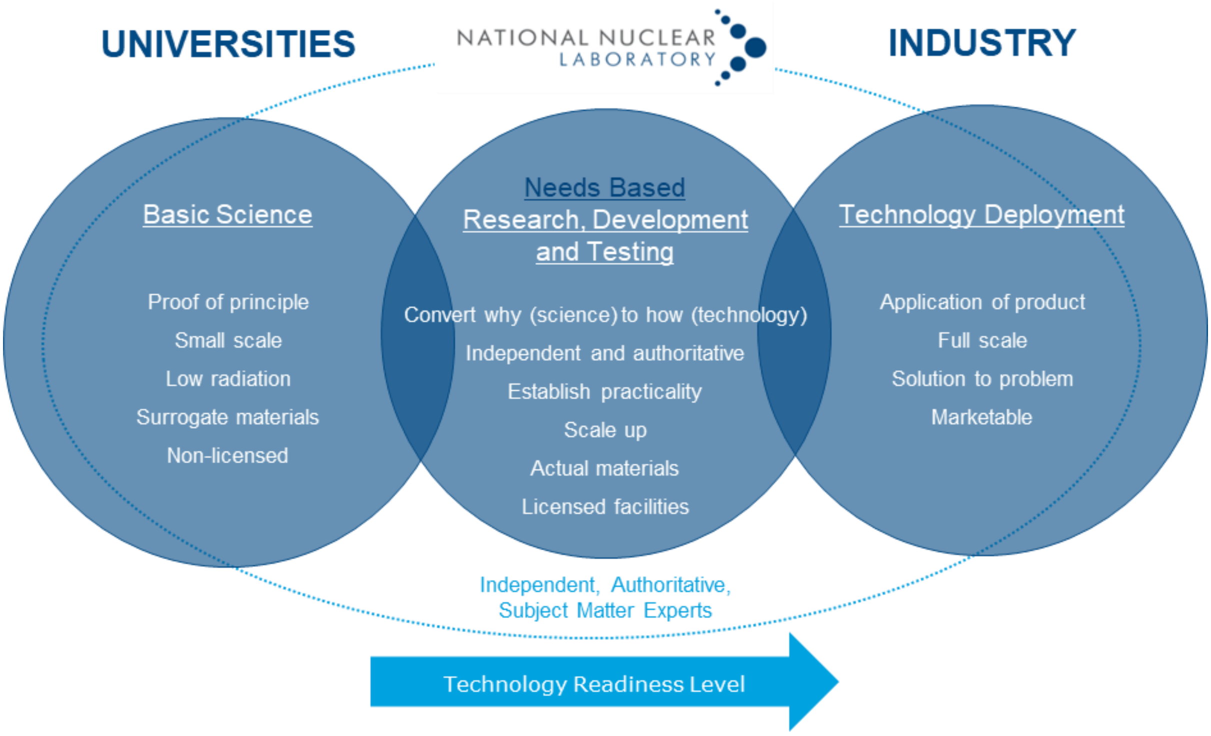
Gradually British Nuclear Fuels plc divested the separate organisations that comprised its major subsidiary British Nuclear Group, with Direct Rail Services (DRS) and International Nuclear Services (INS) transferring to NDA ownership. What was left was a reprocessing, waste management and decommissioning organisation which ultimately became Sellafield Ltd., the NDA's Site License Company (SLC) responsible for the management and operation of the Sellafield nuclear licensed site.

In July 2006, the UK Government stated its intention to preserve and develop key nuclear research and development capabilities potentially as part of a National Nuclear Laboratory (NNL). In October the same year, the Secretary of State for Trade and Industry, announced the establishment of the NNL, to be based on Nexia Solutions and including the building formerly known as the BNFL Technology Centre at Sellafield. The NNL was formally announced by the Secretary of State for Business, Enterprise and Regulatory Reform in an announcement at the Sellafield Visitors Centre on 23 July 2008. In October that year, the newly formed Department of Energy and Climate Change (DECC) engaged in competitive dialogue with two consortia, one made up of Serco, Batelle and the University of Manchester (SBM), the other a joint venture between QinetiQ and Energy Solutions (QQEST). In March 2009 DECC announced that SBM had been selected as the new management contractors for the NNL for an initial three-year period with options to be extended by up to two years. The management contract commenced on 1 April 2009, when ownership of the NNL transferred from BNFL directly to DECC with shareholder responsibilities delegated to the government's Shareholder Executive; NNL thus became a government Owned/Contractor Operated (GOCO) organisation. On 1 October 2013 the management contract expired, and the NNL transitioned to government Owned / government Operated (GOGO) status and it has continued in this way to the present day.

Today NNL is a commercially operated national laboratory providing nuclear services and technology to a range of customers across the whole of the nuclear fuel cycle. It turns over around £100 million every year with a profit (or "Earnings to Reinvest" (ETR)) typically between £5-10 million. The organisation operates some unique and highly specialised nuclear facilities with a rebuild value in excess of £1.5 billion. Employing around 1,000 staff, many of them highly qualified technical experts, NNL is committed to crucial scientific advancement, building on its rich heritage and core purpose as an innovator for nuclear science. It prides itself on pushing the boundaries of science, technology and innovation through its talented teams including technical experts, industry fellows and world-renowned scientists.

In terms of Technology Readiness Levels (TRL), a concept developed by NASA in the 1970s to judge the maturity of technologies during the acquisition phase of a programme, NNL occupies the middle TRL levels. Here it uses needs-based research, development and testing to join up the basic science in academia, with the technology deployment required in industry. Organisations that operate in this space are recognised by government as being essential to drive economic growth in the UK.

Figure 8.1: NNL's relationship with industry and universities



NNL's Values, Vision, Purpose and Strategic Goals

NNL's expertise covers all aspects of nuclear fission, encompassing the full fuel cycle: fuel manufacture, reactor operation, fuel performance, waste management and clean-up, security and non-proliferation, as well as related advanced technologies. Through the application of science, technology and innovation, NNL helps the nuclear industry succeed, typically saving its customers and the UK taxpayer around £1 billion a year by providing innovative and technical solutions to the industry's challenges.

NNL's operating model is unique for a national laboratory being run on a fully commercial basis and funded through contracts with its customers. It delivers to time, cost and quality as any privately-owned commercial company would have to do. However, in NNL's case its shareholder is the UK Government and any monies generated through commercial contracts are not returned to the *shareholder*, instead government allows NNL to *reinvest* its earnings in the business to enhance capability and innovation in the sector.

As well as providing impartial and expert advice to government, NNL is the custodian of many of the UK's unique nuclear facilities and specialist nuclear capabilities and expertise, able to draw upon over 10,000 person-years of technical experience. This unrivalled mix of technical capability allows NNL to successfully occupy the mid-technology-readiness-level space between academic research and industrial deployment.

Science and technology sit at the heart of NNL, and its values were developed around these words and embodied in '*SCITEC':*

- Safety in everything we do
- Customer – delivering value, sharing success
- Integrity – doing the right things right
- Taking responsibility – solving the problem, owning the solution
- Enthusiasm – enjoying what we do, inspiring others
- Collaboration – being inclusive, unleashing potential

NNL's vision and purpose, defined in 2017 are:

- to provide world leading expertise and innovative solutions

and:

- to serve the national interest and create value for our customers, by pushing the boundaries of science, technology and innovation.

NNL's four strategic goals added definition to its purpose and were supported by its values. All its activities were designed to contribute to at least one of these goals which were articulated as:

- Be the trusted national laboratory – Provide expert and impartial advice, leveraging our living network, such that our work is understood and sought out both in the UK and internationally.
- Sustain and grow our business – Deliver innovative solutions that create value for our customers, generating earnings to reinvest through our unique self-funding operating model.
- Foster unique capabilities – Reinvest our earnings wisely in order to maintain and develop facilities, our people and our expertise in science, technology, nuclear operations and safety.
- Shape the agenda – Drive the UK's nuclear research, helping the UK be a top-tier nuclear nation, and grow our influence as we add value to the sector globally.

Adding value to customers

The NNL supports a number of customers across the sector and delivers value to the UK nuclear programme by supporting:

- Continued operation of the existing reactor fleet
- Legacy Waste management and Decommissioning
- New nuclear build

- Geological disposal
- Disposition of the UK's Plutonium stockpile
- Naval propulsion programme
- Advanced reactor (Generation IV) and fuel cycle development
- Space power systems
- Security, Non-proliferation and Safeguards

It's been adding value to its customers in the traditional sense for many years through its various incarnations, supporting nuclear operations and finding solutions to problems and enabling its customers to reduce their life cycle costs. As an example, the NNL and its partners in the supply chain, have facilitated the delivery of billions of pounds worth of value to its biggest customer, Sellafield Ltd over the last decade.

NNL's interest in public value

So why is NNL interested in public value at this point? NNL has and still does, put a lot of effort into understanding how it can save its customers money and generate value. Value, or saving money, in the traditional sense is usually interpreted as doing something cheaper than planned, spending £90 instead of the expected £100 for the same goods or service. However, this is a very narrow and some would argue, naive way of looking at value and tends to restrict organisations thinking to the transactional rather than the transformational. Using the same example, saving £10 to deliver the same goods or service is not as *valuable* as spending £110 for the same goods or service, *if* the goods or service results in a bigger saving, say £1,000 elsewhere. This bigger *saving* elsewhere can either be reducing a very large planned expenditure, say reducing the cost of a new build because of a better design, or perhaps solving an unforeseen problem that would prevent a very large and unplanned expenditure. Hence, a more appropriate interpretation of value is:

Reducing or avoiding planned or unplanned expenditure

NNL can cite many examples of generating this kind of value for its customers. In fact, the vast majority of work placed with NNL can be distilled down to the above definition in some way, shape or form. However, through its relationship with the University of Central Lancashire (UCLan) NNL began to think more widely about the generation of value and thinking beyond transformational and strategic value generated for the nuclear sector. These thought processes lead them to think about the generation of value within the public sphere.

This approach is actually key to current government thinking, with the government's *Green Book* stating that *"The full value of goods such as health, educational, success, family and community stability, and environmental assets cannot simply be inferred from market prices, but we should not neglect such important social impacts in policy making."*. Indeed in 2017, the Chief Secretary to the Treasury stated that *"If we can't measure results, people will talk about what they always talk about: money. We need to track how we turn public money into results for citizens. We need to understand the impact each pound spent has."* As Sir Michael

Barber noted in his 2017 report *Delivering better outcomes for citizens: practical steps for unlocking public value, "financial efficiency does not equal public value"*

In thinking about this broader public value perspective, NNL was keen to use the output to aid it in the development of its strategic planning process as it prepares itself to support UK nuclear in the decades to come. So in order for NNL to gain some knowledge of its perceived societal value, value beyond the purely financial, it engaged with UCLan to develop a questionnaire that tested a variety of propositions with a selection of *'reasonable and informed'* citizens, in this instance a cross section of NNL employees and individuals from one of its largest customers, Sellafield Limited.

The public value appraisal

The public value perspective gives a wider view of the impact of an organisation beyond market relationships and 'hard' outputs. A public value approach focuses upon 'softer' outcomes for human beings seen as citizens not as consumers or suppliers (though this is not to say that no non-financial accrues in these circumstances!). As previously discussed, (chapter two) the core underpinnings of public value are human values. Variously defined (eg Schwartz 2012; Rokeach 1979; Rohan 2000) these fundamentally human constructs represent the 'code' or lexicon of our humanity and provide an insight into the things we are motivated to pursue and desire and which we as human beings seek. They are the 'subjective reference points' (Meynhardt, 2018) against which we, as humans make evaluations about the world as we experience it and as we perceive it to be and as we aspire it to be.

The essential insight underpinning our approach to public value, and the use of human values in public value profiling, is that broadly speaking, individual humans possess the same value set, but the order of their priorities of values will differ. The value sets of the value theories we use cover broadly the full constellation of human value categories which are essentially recognised and 'valued' to a greater or lesser extent by all citizens. They are in this sense 'public' values.

Working with NNL, we were particularly interested in the activities of NNL which has outcomes which could be meaningfully couched in public value terms, and which we could use these as a basis for relevant propositions. Broadly speaking, NNL perceives it makes a contribution to society in many value categories from more material values associated with safety, security wellbeing and financial resources to higher order values associated with overall quality of life and aspirations for the future. Even at this initial stage of the project the potential scope and scale of the public value of NNL became clear. NNL was especially interested in regarding the forum or domain for the realisation of these values, spatial and temporal in west Cumbria.

For this evaluation of the perceived public value contribution of NNL, we have used two values theories. Each of these theories and value categorisations aim to be comprehensive in that they seek to represent the totality of public value categories, albeit at a broad level of analysis, covering the entire gamut of human needs, motivations and values against which individuals make evaluations, form decisions, act and react. Together, these values theories give a comprehensive insight into the impact of NNL upon the public sphere at national and local levels and in the future.

In this chapter we base our analysis on the results of an opinion poll of reasonable citizens who had a sufficient level of understanding of NNL's activities and outputs to give a meaningful response of substance about NNL's contribution to public value in the public sphere.

We draw firstly upon the work of Meynhardt (2009, 2011, 2012, 2016, 2018). His psychological theory of public value and its basis in the CEST value theory of Epstein (1985, 2003) was discussed in chapter two. We also draw on Schwartz (2012) whose motivation-based approach represents the state of the art, focusing principally upon the internal structure of individual value orientations and the human value universe (Datler et al 2013).

The Schwartz approach revolves around the notion that values are based upon fundamentals of human existence (see chapter two). that consequently humans all possess the same value set, but they may be distinguished by the priorities they assign to them, an approach used by a number of scholars (eg Rohan 2000) and that a number of values may be brought to bear upon a particular referent.

Each theory foregrounds a different element of human values and a different way of envisioning them. Meynhardt focuses upon Epstein's CST theory deriving values from basic needs (xx), whilst Schwartz derives value from human motivations (2012). Together these theories will give a comprehensive appreciation of the dialogue between NNL and the public and its wider perhaps more diffuse and indirect role in the public sphere. These value theories highlight relationships and the wider fit of values in people's lives and for an organisation like NNL they give an indication of the impact of their activities to individuals daily lives, and we draw upon these in the analysis and interpretation of the data in this chapter.

A series of propositions which were designed to probe perceptions of the value of NNL as an organisation tapping key human value dimensions. To achieve this we constructed a series of 'hybrid' propositions n element each comprising a belief about NNL and a Working with NNL we were able to construct a series of propositions in a questionnaire which probed the perceived fit between the activities and outputs of NNL and human value types (Rohan). This analysis will give a comprehensive view of the impact on people's lives, and an insight into the relationship between those impacts and the ability of an organisation to make a focused, maximal contribution towards the realisation of human value.

From these discussions, it was clear that local and national levels and future orientations were key domains within which NNL perceived itself to be creating public value and about which the organisation was interested in its public value perception. At the time of the methodology design it was understood that the findings of this public value research would be used as input to NNL's strategic planning process so it was important that the insights were relevant to the commercial domain and the language used to express them was meaningful and could be related to the NNL strategy process.

A questionnaire was developed with NNL which was based upon the Meynhardt (2012) typology which was based upon four key value domains plus an additional category giving perceptions of financial stability (and consequently operational longevity) to give a public value profile of five dimensions. For this exercise we focused upon the positive contribution as well as the risks associated with the public value contribution of NNL.

The first values category set theory we use is based upon Meynhardt who argued that to create public value means "…to make a contribution to our lives and life chances – creating an experience in our daily lives that is consistent with our motivations – our values." (Meynhardt, 2018). Drawing upon Epstein (1985, 2003) he developed an approach to assessing the public value contribution of an organisation which was designed to reveal and "…make transparent an organisation's contribution to the common good" (Meynhardt Hermann and Brieger 2018).

From an operational standpoint, Meynhardt's approach is useful in that it relates "managerial action requires a basic idea of what to strive for: one cannot purposefully create public value without explicit reference to human nature" (Meynhardt 2009). Meynhardt uses a psychological approach to public value based on a focus on outcomes in respect of delivering what society needs and wants, their 'common good' practices (Meynhardt et al 2018). "…human beings feel positive about something that results in a direct personal gain and/or a positive impact on the community or society they live in." (2018 page 2)

Meynhardt sees public value as measurable, against four fundamental dimensions or 'content categories' arguing that value is achieved if an individual perceives a referent makes a positive contribution to the public sphere. Drawing upon this approach we created a series of propositions which probed the perceptions of reasonable, informed citizens in the pursuit of public value. His work was based upon cognitive-experiential self-theory (Epstein, 1989, 1993, 2003), which holds that people have four equally important basic needs: to have a positive self-evaluation; to maximize pleasure and avoid pain; to gain control and coherence over their conceptual system; and to have positive relationships.

A series of propositions were constructed which contained a belief and a value element associated with NNL. Following the Meynhardt approach we also used a series of responses which probed the risks stakeholders associated with the articulation of a public value profile for NNL. Meynhardt (2009, 2015) translates four basic need dimensions from cognitive-experiential self-theory (Epstein 1985, 2003) into four dimensions for organizational research into the perceived public value dimensions. Using his summary terminology below, he added:

- "Is it useful?" – Utilitarian-instrumental values (1)
- "Is it decent?" – Moral-ethical values
- "Is it politically acceptable?" – Political-social values
- "Does it allow for positive experiences?" – Hedonistic-aesthetical values

In more detail, these core value categories:

- Moral-ethical values: essentially asking the question: is it decent? An organization is perceived as creating public value along this value dimension if it behaves decently allowing individuals to retain a positive sense of self-worth.
- Key motivations respect, dignity, a feeling of high social esteem (Meynhardt 2016)
- Hedonistic-aesthetical: the basic need to maximize pleasure and avoid pain. From this perspective, an organization creates value when an individual evaluates an organization's actions favourably through its contributing to positive experiences, thereby increasing individual quality of life.
- Key motivations positive emotions – fun, pursuit of pleasure, beauty
- Utilitarian-instrumental: the basic cognitive need for stability, certainty and predictability to gain control and coherence over one's conceptual system. In an organizational context, people experience this need for control and orientation as satisfied when they see the use of services and products and evaluate an organization's actions as being purposeful for society, contributing to order and predictability
- Key motivations control and predictability- usefulness a degree of agency.

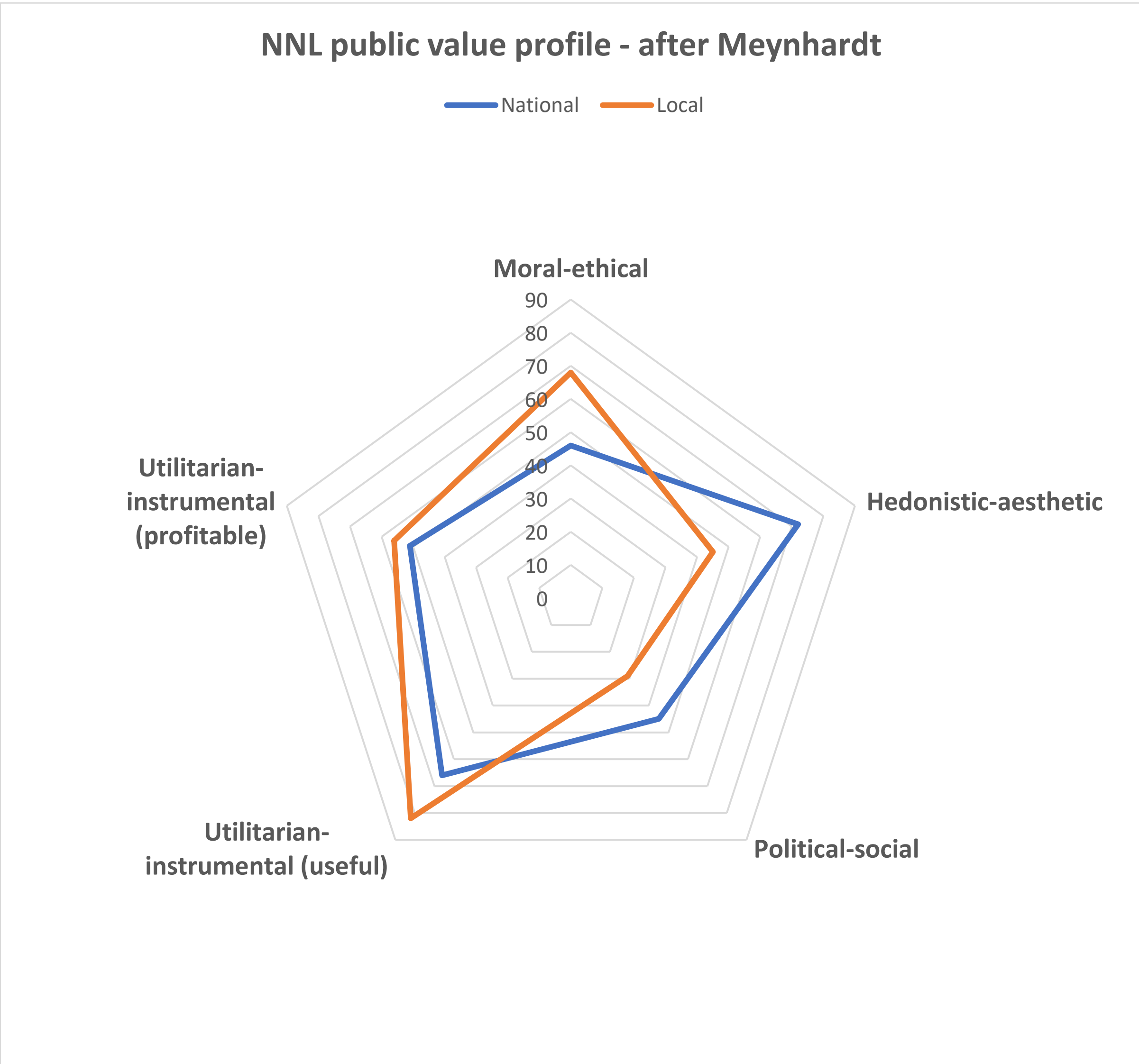
- Political/social: the basic need for positive relationships which are crucial for an individual to develop a sense of belonging and identity. Organizations can be evaluated from a political-social perspective concerning their contributions to fostering a feeling and sense of social cohesion within a social group.
- Key motivations: Relatedness and belonging, social attachment and group identity: social stability and participation in the political process.

The question of the public sphere emerged in our configuration of a questionnaire probing the perceived value of NNL. To acquire data of relevance to NNL in its appreciation of its contribution to the public sphere, and its subsequent strategic use of public value information, we approached the capture of meaningful data from two perspectives. Firstly, the scope of the public sphere and secondly the human values categories. Regarding the public sphere, we followed Meynhardt's approach in creating a public sphere in order for respondents to address the question of value contribution in four ways – with a series of propositions probing the similar value categories assessing NNL's perceived contribution to the public sphere from three perspectives, nationally, locally and in the future. The following table and diagram summarise the responses.

Figure 8.2: *"Agree" and "Agree strongly" responses for local and national publics as perceived by all responses*

NNL Public value profile categories	National per cent	Local per cent
Moral-ethical	46	68
Hedonistic-aesthetic	72	45
Political-social	45	29
Utilitarian-instrumental (useful)	66	82
Utilitarian-instrumental (profitable)	51	56

Figure 8.3: Table charting these data for agree and agree strongly responses to propositions in the five categories revealing a slightly different profile



The value appraisal reveals significant positive responses in the following 'value dimensions'. The highest score is for *utilitarian useful* categories at the local level, and *hedonistic-aesthetic* at the national level. Comparing local and national responses to the utilitarian useful responses, the contribution of NNL to providing stability and certainty for individuals at a local level was its highest score (82 per cent) with two thirds (66 per cent) of respondents agreed or agreed strongly with the proposition at the national level. For hedonistic aesthetic responses highest 72 per cent national with a minority agreeing or strongly agreeing locally (45 per cent).

Comparing all local and national level majority responses the following we see the following:

Local level majority responses

moral-ethical

Utilitarian-instrumental (useful)

Utilitarian – instrumental (profitable)

National level majority responses

Hedonistic-aesthetic

Utilitarian – instrumental (useful)

Utilitarian – instrumental (profitable)

Fundamentally, from the evidence gathered as input to this survey, NNL is seen as a useful organisation at both local and national levels. In the context of a perceived usefulness and contribution made by NNL to the public sphere in both utilitarian categories used by Meynhardt (usefulness and profitability) we see variance between local and national 'levels' in respect of the moral-ethical and hedonistic-aesthetic value categories.

Moral-ethical majority locally (68 per cent) with a minority nationally (46 per cent)

Seen as creating outcomes which allowing individuals to retain a positive sense of esteem and self-worth at a local, compared with a national level.

Hedonistic-aesthetic majority nationally (72 per cent) and a minority locally (45 per cent)

Seen as contributing to positive experiences, by increasing individuals' quality of life more at the national level.

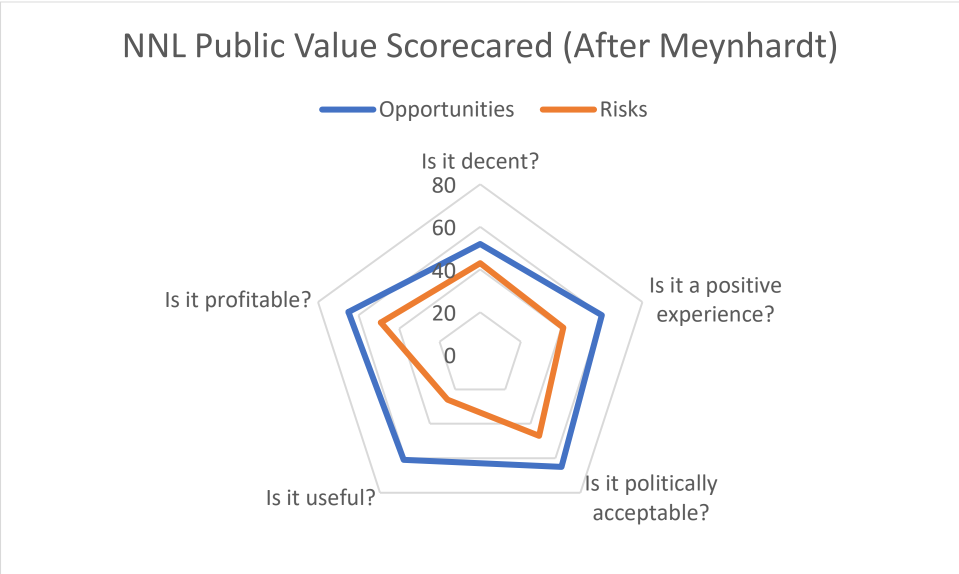
Political/social by a larger minority nationally than locally.

In this respect NNL, evaluated from a political-social perspective seen as making a significant contribution to fostering a feeling and sense of social cohesion within a social group at both a national level (45 per cent) and at a local level (29 per cent).

Using the Meynhardt approach, an assessment was undertaken of the risks perceived by respondents as being associated with NNL maintaining its public value contribution taking into account public awareness and prevailing This analysis is based upon a series of propositions in all five value categories used by Meynhardt (2015). Within the battery of questions used in this survey there was also a series of propositions relating to perceptions of factors (risks) affecting the delivery of value in these categories. In all of these categories a key factor was the lack of awareness of the activities of NNL and a concern that the organisation was not prioritised in the region as a nuclear priority. At the time of the survey (2007-8) a new nuclear power reactor company (NuGen) was in play in west Cumbria and this £15 billion investment was dominating the

Since that time the NuGen project has failed and the nuclear landscape in west Cumbria has changed somewhat with NNL being seen as a greater part of the future of the industry in the absence of other viable alternatives. For the purposes of this report we have focused upon the positive value aspects of the survey. That said, the point remains that there are factors working against an organisation in its pursuit of its realisation of public value.

Figure 8.4: Public value 'scorecard' after Meynhardt for NNL based upon Meynhardt's five key value categories



The results of this survey suggest that overall, NNL is seen as providing significant public value but in a somewhat different configuration at a national level, compared with at a local level. However, at both national and local levels there are issues with the organisation's public value profile

In both of the utilitarian domains defined by Meynhardt (usefulness and profitability) NNL is perceived as offering value in the public sphere whose value is realised in its contribution to the security, longevity and sustainability of the social, physical and cultural environments.

This reflects the outcome of local activities, employment and engagement in the vicinity of their main facility in west Cumbria.

The scores were higher in the moral-ethical dimension for the local level proposition, revealing that NNL is seen as making a positive contribution towards allowing individuals to retain a positive sense of self-worth. From the evidence of this data, NNL is perceived as providing very significant public value as a contribution to the realisation of individual basic needs in the arenas of economic, social and environmental and cultural stability both nationally and (especially) locally. At the wider, national level NNL is seen as contributing to quality of life across a wider community. And at a local level more engaged with individuals, reflecting perhaps its embedded nature in the locations it is based in, especially west Cumbria.

Schwartz

We turn now to a second analysis of the NNL data using value categories based upon the work of Schwartz (2012). To achieve this, we continue using a 'hybrid proposition' approach derived from implementing a Meynhardt methodology, extending the analysis using the value elements derived from the Schwartz value circle described in chapter two. The data from this analysis was structured to allow a comparison between local, national and future 'publics'.

The work of Schwartz (2012a) is perhaps the most widely used gives one of the most widely used value frameworks available today. Focusing upon the motivational concern at the core of each 'value' (Rohan 2000) this model is based upon the assumption that all people may be differentiated only in respect to the relative priority they place upon a 'universally important' set of values which are held across cultures and communities (Schwartz, 2012; Rohan 2000).

Broadly speaking, the Schwartz value framework comprises four summary value categories and, in this analysis, we focus upon two organising principles (Schwartz 2012a) into which they may be arranged. The two categories are firstly, those associated with how individuals express personal interests using value categories Schwartz terms "Openness to change" and "self enhancement". A second set comprises values which regulate how individuals relate to society and social interactions which he terms conservation and self-transcendence. The four categories may be unpacked a little as follows:

- Self-transcendence: values concern for the welfare and interests of others (universalism, benevolence)
- Openness to change: values that emphasise independence of thought action and feelings and readiness for change (self-direction, stimulation)

- Self enhancement: values that emphasize pursuit of one's own interests and relative success and dominance over others (power, achievement).
- Conservation: values that emphasise order, safety, self-denial preservation of the past and resistance to change (security, conformity, tradition).

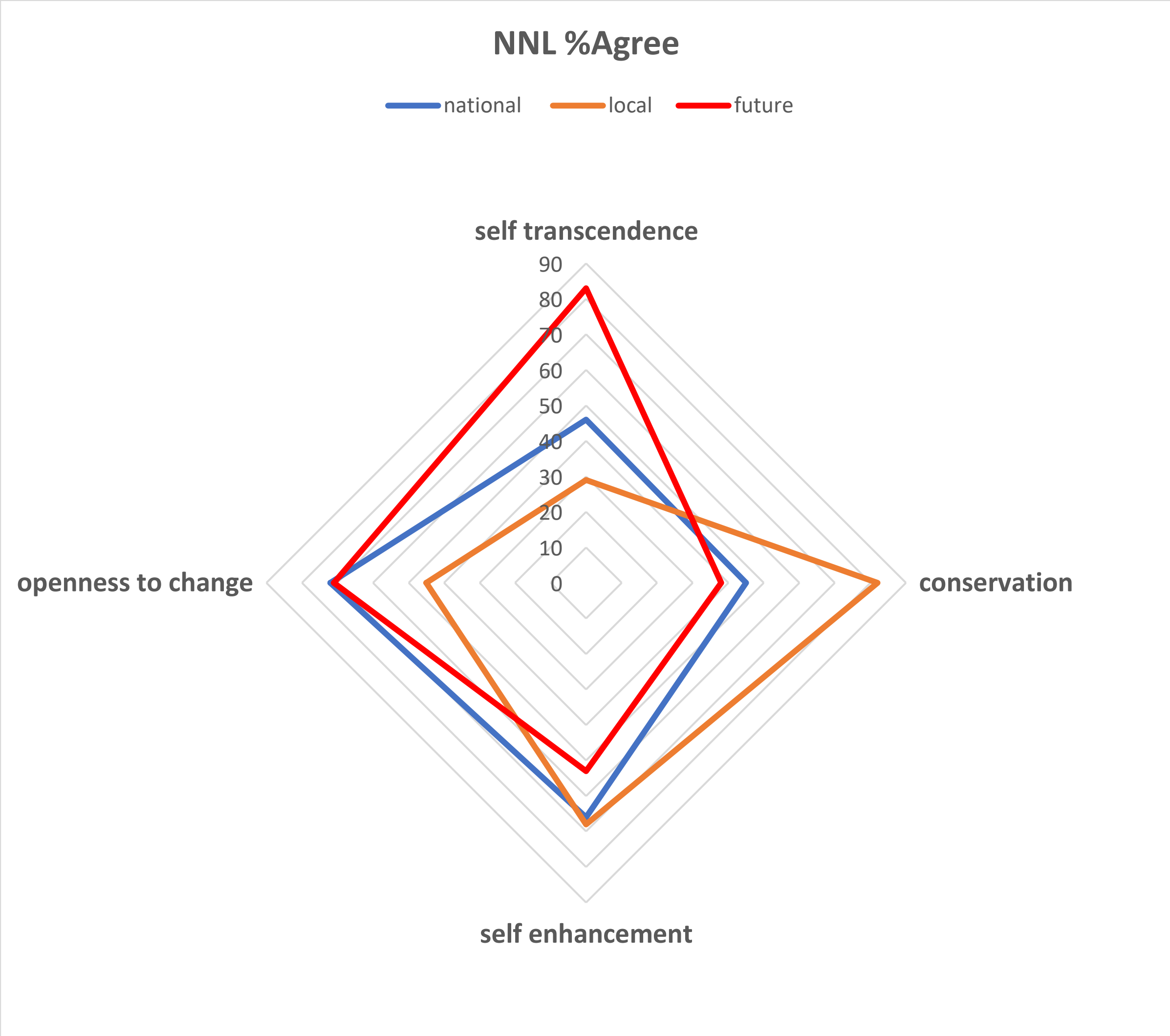
The recoding of the data acquired from respondents reveals that NNL makes a significant contribution to public value in all three public domains – national, local and future. Some significant differences were revealed between the values in each set and across the three sets.

Figure 8.5 re-coded response data using Schwartz value categories (Schwartz 2012a). Responses given to propositions framing NNL and its value contribution in three ways. Firstly, at the local level, secondly at the national levels and thirdly perceptions of its future contribution to value in the public sphere.

Figure 8.5: “Agree” and “agree strongly” responses

TOTAL SET SCHWARTZ	national	local	future
self-transcendence	46	29	83
Conservation	45	82	38
self enhancement	66	68	53
openness to change	72	45	71

Figure 8.6: Radar diagram rendering the above scores:



The diagram above reveals the key findings which are revealed in the different profiles of the response graphics for the three public settings – national, local and future. At a national level, the highest scores awarded to value categories associated with achievement and the self. These categories are ‘openness to change’ (72 per cent) and ‘self enhancement’ (66 per cent), and propositions tapping these categories both achieved majority responses with the other two socially focused categories receiving almost equality (50 per cent) responses. At a local level, NNL is perceived as making a contribution in the more socially-focused value category of ‘conservation’ (82 per cent) and the personally-focused category of ‘self-enhancement’ (68 per cent). These were the largest responses to these categories across the three ‘publics’.

In the future category, NNL is perceived as making a substantial contribution in both social and personal categories. However, the most significant contribution to public value was perceived as being in the ‘self-transcendence’ category. This score gives the future value plot on the above diagram a distinctive profile with its modal value contribution being perceived as facilitating a value contribution in public sphere at the societal level, moving beyond individual interests and in the future values associated with a wider concern and benefit to society.

‘Self enhancement’ and ‘openness to change’ were seen as positive with NNL being perceived as making a contribution to the realisation of values associated with these categories at local and national levels and into the future. At a local level, conservation, especially associated with safety and security, was a key outcome.

What did the results tell us?

In general, NNL is seen as providing significant public value but is perceived differently whether considered from the national or the local level. However, at both national and local levels there are issues with the organisation’s public value profile. There was generally a lack of awareness of the activities of NNL and a concern that the organisation was not recognised in the region as a priority organisation for the nuclear sector. Addressing these issues will be key for NNL going forward.

In terms of usefulness and profitability, NNL is perceived as providing value in the public sphere. Its value manifested in its contribution to the security, longevity and sustainability of the social, physical and cultural environments within that sphere, probably linked to its impact on employment and engagement in the vicinities in which it operates.

The data in this study provides evidence that NNL is perceived as providing very significant public value as a contribution to the realisation of individual’s basic needs in the arenas of economic, social, environmental and cultural stability both nationally and particularly at the local level. At the wider, national level NNL is seen as contributing to quality of life across a wider community.

The data also reveals that NNL makes a significant contribution to public value not just at the local and national levels as discussed, but also in terms of the future. In other words, what it does today is seen as generating value in the future. This is important in terms of public value perceptions, as NNL is seen to contribute to building a better future for individuals and society, however the downside is that it can be difficult to build arguments that mean committing public money *now* to reap rewards years down the line.

From a local point of view, NNL is perceived to be contributing in the more socially focused and personally focused categories, supporting the local community and enabling individuals to improve their lives. In the future, NNL is perceived as making an important contribution in both social and personal categories. However, the most significant contribution to public value was perceived as being in the ‘self-transcendence’ category; adding value at the society level, moving beyond just the interests of the individual.

Value categories associated with ‘Self enhancement’ and ‘openness to change’ were positive, with NNL perceived as contributing to the realisation of values associated with these categories, at local and national levels and into the future. At a local level, ‘conservation,’ especially associated with safety and security was a key outcome, particularly in the future context. NNL is perceived as providing significant public value in terms of contributing to the realisation of individuals basic needs in the areas of economic, social, environmental and cultural stability both nationally and locally. At the wider, national level NNL is seen as contributing to quality of life across a broad 'public' and providing opportunities in the future.

Review

For NNL, the results provided some very useful insights into how the organisation is perceived at the local and national level, but also in terms of future timescales. Locally, NNL is recognised as being useful, profitable and contributing to public value, both at an individual level regarding people's basic needs, and the ability to improve their lives, and at a wider society level, particularly in terms of safety, security and sustainability. This obviously links to communities in close proximity to NNL's operations having a good understanding of what it does and what it supports, particularly in Cumbria.

Nationally, NNL is also viewed as a useful, sustainable organisation by stakeholders, seen as contributing to quality of life across the wider community, but is less well understood in terms of how much it contributes to public value. In terms of added value in the future, NNL is recognised as an organisation that can add value to the public sphere, building on what it does today to enhance value to the public in years to come, whether at an individual or a broader society level.

In terms of risk for the organisation, associated with its ability to fulfil its potential regarding contribution to public value, the general lack of awareness of NNL's activities and the broader benefits to society is a concern and needs to be tackled. This in turn should improve the perception of NNL in the region and beyond. As will be discussed in more detail later in this chapter, the local, national and future overall public value profile of NNL is a good profile for the organisation, but the awareness and recognition of NNL and its activities in relation to public value needs to be addressed.

The work with UCLan on public value took place around about the same time NNL was considering its vision, purpose and strategic goals and how it positioned itself for the future. The research led NNL to fundamentally question what its purpose was and what it existed to do, not just in the nuclear industry, or the local communities, but more broadly in terms of national and international impact on society. Reviewing its customers, such as Sellafield Ltd, EDF Energy, Ministry of Defence, BEIS, Westinghouse, Nuclear Decommissioning Authority (NDA) and the products and services it provides for them, led to a realisation that the activities it undertakes can be *'chunked up'* and categorised into four distinct areas:

The first area is about supporting the NDA and its estate, particularly Sellafield Limited, dealing with the UK's nuclear legacy, supporting existing operations and developing new technologies for post operational clean out (POCO), decontamination and decommissioning. The second area is about supporting existing reactor operations, fuel manufacturing customers such as Springfields Fuels Ltd (SFL) and government with respect to the next generation of nuclear power, small modular reactors (SMRs)/Advanced Modular Reactors (AMRs) including advanced fuels and advanced fuel cycles.

The third area concerns NNL's role as a strategic authority supporting UK Government in terms of national nuclear security and safeguards and enabling government to fulfil its international obligations with the International Atomic Energy Agency (IAEA) and the United Nations Security Council. The fourth area is centred on NNL's aspiration to support the nuclear medicine and healthcare sector, utilising its technical expertise and unique facilities to access, separate, refine and supply radioisotopes to medical clinicians and researchers. In terms of societal impact, part of this strategy is about changing existing public perception of the UK's legacy nuclear waste to view it as a nuclear resource.

In all areas, NNL are also concerned with maintaining and protecting key skills for the future of UK nuclear, even where these are not directly customer funded. Having identified these four areas and considered in the light of the public value categories associated with the work of Meynhardt and Schwartz, listed above, NNL were able to distil these into the following four *strategic focus areas*:

Figure 8.7: NNL's four strategic focus areas in the light of the above public value profiling exercise.

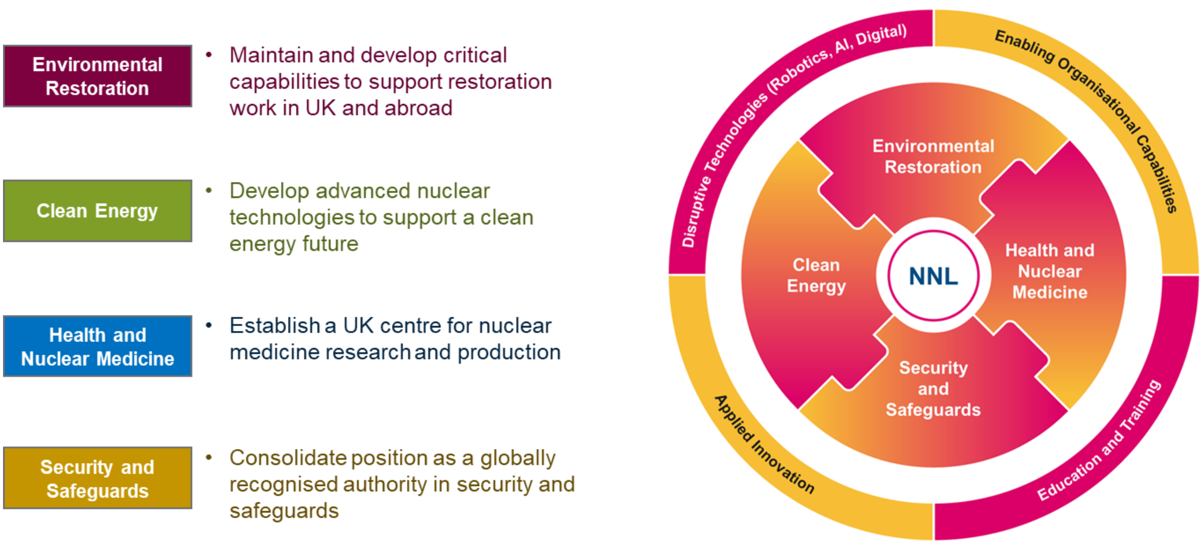
ENVIRONMENTAL RESTORATION

CLEAN ENERGY

HEALTH and NUCLEAR MEDICINE

SECURITY and SAFEGUARDS

These represent the key areas for NNL to focus its strategy moving forward and help to provide a clear and simple corporate focus for the organisation and its staff.



This thought process then led to the redefinition of NNL's fundamental purpose, which can now be stated as harnessing:

"Nuclear Science to Benefit Society"

This is a logical progression from the current formulation, *"to serve the national interest and add value to our customers…"* but is much more compelling and enables NNL to become a purpose driven organisation. The companies new strategic focus and its revised purpose are also in alignment with government's policy, particularly in the areas of clean energy and environmental restoration. The department for BEIS single departmental plan, published in June 2019, lists among its objectives to *'Ensure the UK has a reliable, low cost and clean energy system.'* This includes:

- Setting out a vision for the energy system consistent with the government's 2050 climate goals, with concrete actions that government will take up to 2030
- Continually improving civil nuclear security and safety arrangements, ensuring they are robust and effective, working closely with industry
- Supporting clean growth and promoting global action to tackle climate change
- Ensuring our energy system is reliable and secure into the future
- Delivering affordable energy for households and businesses
- Managing our energy legacy safely and securely, ensuring cost effective, environmentally sensitive decommissioning of our civil nuclear waste

Using NNL's expertise and capability to focus strategically on health and nuclear medicine and security and safeguards, directly addresses Maslow's hierarchy of basic human needs (reference discussion in chapter 2). Health and nuclear medicine directly link to the most fundamental human need – that of survival, whilst security and safeguards addresses the next most important need on the hierarchy model, shown below. Managing our nuclear legacy responsibly and restoring the environment, whilst at the same time supporting the production of clean environmentally responsible nuclear energy, picks up several threads running up through Maslow's hierarchy: social needs, esteem, self-actualisation, and so on.

So, as an organisation, NNL's strategy, strategic goals and fundamental purpose are now firmly embedded in the most basic of human requirements and needs, whilst also linking into the governments business, energy and industrial strategy department's plan. Having such a key focus on issues of such importance ensures NNL plays a major role in delivering public value to society as a whole, which in turn ensures its board, its management and its staff have a clearly defined purpose that is driven throughout the organisation.

Conclusion

The public value profile generated for NNL as a result of this work was positive, pointing to several areas of impact and influence in the public sphere. Indeed, these results prompted NNL's thought process resulting in a fundamental change in how the organisation articulates its strategy and purpose, both to the outside world and to its own staff. In this respect, the company regards this collaborative work with UCLan as a real success.

However, there are several issues arising from the public value profile that NNL must address for the future.

The first issue that arises is associated with the often longer lead times within the nuclear industry required to implement and reap the benefits of new technical solutions or innovations. This can be both a blessing and a curse: positive from the perspective of value to the public going forwards; but negative in terms of gaining commitment on public expenditure in the short-term to generate benefit in the future.

The second issue is that from both a local and national perspective, there was a lack of awareness of the organisation’s activities and a related concern that it was not as well recognised for its contribution within the regions it operates in. This is about gaining stronger recognition of the role it plays in delivering advances in science and technology to bring benefits to the public. These could restrict its potential to contribute technology and innovation to the sector. These findings have given NNL a clear understanding of how it needs to change its narrative internally, but more importantly, *externally* across all its stakeholder groups. NNL needs to address *how* it better communicates this narrative to society and citizens.

9. Public value at the European Space Agency

Gianluigi Baldesi, Estelle Godard and Rick Wylie

This chapter is based on the work of a collaborative research project between the European Space Agency (ESA) and UCLan's Applied Policy Science Unit (APSU). It is based on a conceptual framework that draws upon a distinctive synthesis of theories of public value, human values and needs.

As space is an enabler for growth and innovation, the results and applications deriving from its use, have macro and micro benefits worldwide. It spans so many areas that it is difficult to find the one single value for space and while most of the space community is aware of the benefits generated, it might be less obvious to the general public. A public value approach to an assessment of an organisation raises new questions about its performance and brings the public's voice and values into the policy process. Hence, this collaborative research project under the auspices of ESA_LAB@UCLan (a joint research initiative in public value between ESA and UCLan) sought to provide a comprehensive analysis and framework for the measurement of the wider perceived public value of space agencies likes the European Space Agency (ESA). The research contributes to the progress on public value theory in the space sector by leveraging conversations in context with ESA employees while stimulating reflection on the impact of space and ESA beyond its socio-economic benefits.

This quantitative and qualitative case study utilises a specific methodology of public value measurement. The external analysis (two campaigns with a total of 400 responses) shows the significant level of ESA's perceived value contribution to the public sphere. The 400 questionnaires, comprising 19 questions, were used to survey a sample of informed citizens coming mostly from France and Italy. The approach probed the perceptions of ESA in respect of citizens' beliefs about the organisation's contribution to value in the public sphere through the lens of the totality of human values. The findings reveal a very significant level of perceived contribution of ESA to the public sphere. The internal responses show a lower perception of ESA's performance externally than internally, except when it comes to human values comprised in the 'self-enhancement' category. Using the European Social Survey, a quantitative analysis was performed to confront ESA's results with the public value priorities of citizens. Results show ESA is perceived as contributing to 'openness to change' and 'self-enhancement' values and is contributing at a slightly lower level in the 'conservation' and 'self-transcendence' value categories.

Overall, the outcomes of this research helped highlight how ESA may position itself as a public value organisation and provides suggestions on ESA communication and overall strategy. Moreover, it enables the development of a portable and scalable public value framework that can be transposed to other organisations in the space sector which can be used in order to reach real-world impact across sectors and societies. Given the democratic nature of ESA's Space for Earth activities (like the delivery of communication and navigation satellite facilities) and the importance of the public perception of ESA's value among funders and stakeholders, this research gives a fuller appreciation of the overall value of ESA and space activities. However, the recent Covid-19 crisis challenged current results and possible implications for the results of this study are provided.

Aim of this project

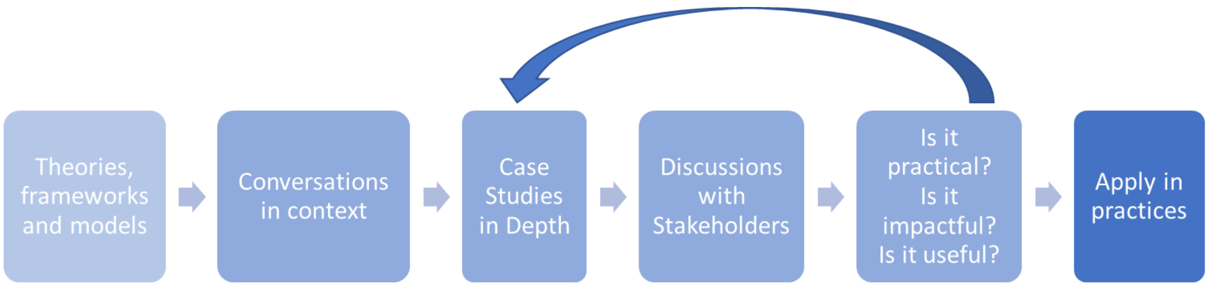
The aim of this project is to assess the public value of ESA and make appropriate recommendations for its optimisation. As we have seen in this book, the foundation of public value is human values. This project is based on a distinctive synthesis of tested theories, models and frameworks of public value, and human values and needs. The approach used centres on the perception of an organisation by informed citizens assessed against a comprehensive and inclusive set of human value categories. An empirical study of this type, based on original data, is rare in public value research and this project is breaking new ground in the acquisition and analysis of human values in the public value management process.

Today, values beyond financial efficiency, especially democratic values, are becoming more appreciated among the public, policy makers and politicians (Bryson et al 2014) and these are at the heart of public value. These democratic participatory values may be at the heart of space 4.0 (essentially the evolution of the space sector through interactions between public and private sector, society and politics) as it *"…innovates, inspires, informs and interacts for the benefit of the European citizen, society and economy"* (Woerner 2016). In the context of space 4.0, public value is a key issue for ESA, as it is increasingly required to address issues of its effectiveness as well as its financial efficiency (Schrogl 2018). Moreover, with space becoming closer to consumers and society (Mazzucato and Robinson 2017 citing ESA's Director General), a public view of activities is important as citizens become involved in the co-creation of outcomes and outputs from space technologies through their use of space-derived data and information.

Conversation in context with ESA employees

In the spring of 2018 APSU, under the auspices of ESA_LAB@UCLan undertook a series of 'conversations in context' interviews in ESA's Paris headquarters, which focused upon the internal and external public value environment of ESA. These interviews explored the awareness of public value and the existence of shared public values among surveyed ESA employees, and the public value implications of the context within which ESA was operating within space 4.0. These exchanges set the scene for the subsequent public value profile research.

Figure 9.1: Diagram showing how the conversations in context interview stage is located in the wider public value collaborative project



The conversations in context revealed an appreciation of the importance of public value to ESA and its key role in the future of the organisation. It was generally considered among respondents that it is important to promote the public value among Member States who fund and control the organisation. However, it was generally felt that the strategic situation within which ESA is positioned makes it, to a certain extent, invisible in the public sphere compared with national space agencies. Recognising ESA's dependence on funding from Member States it was felt that there was a clear need for engagement and dialogue with the public, especially at a challenging time for public finances. Moreover, it was felt that accountability to citizens, and a higher public profile, would give enhanced legitimacy and a stronger mandate to ESA.

From these interviews a consensus on categories of wider public value associated with ESA's operation among some of those interviewed emerged. These were:

- prestige;
- aspiration;
- elements of the Space for Earth programme serving member states' citizens especially in respect of agriculture, transportation, imaging and communication.

From these interviews and conversations, it was very clear that the importance of public value to ESA in the New space economy was recognised among ESA staff. It was also clear that ESA makes a very significant public value contribution which goes unappreciated both by the public and even by ESA's own staff.

Surveying informed citizens

The second part of this project, which was informed by the earlier interviews in Paris, involved surveys with two groups of informed citizens, specifically selected in settings in which respondents could act as proxies for the public's awareness of the contribution of ESA to the public sphere. The first survey was undertaken at the Paris Air Show using a questionnaire developed by UCLan's APSU in collaboration with ESA and administered by a team from ESA. An identical questionnaire was used at the New Space Economy (NSE) Forum in Rome in December 2019 that was implemented by APSU. The analysis reported in this document has been undertaken by APSU in collaboration with the Corporate

Development Office of ESA's Strategy Department. It gives an overview of the depth and breadth of ESA's public value contribution as perceived by two groups of informed citizens. Demographic details of the samples are given in the appendix. It must be stressed that these surveys were not intended to constitute a representative sample of the national populations.

These groups were used for the survey within the methodological framework of our public value management project as groups of citizens who would have some knowledge of the space sector and the work of ESA. This meant that they were able to give an assessment of the contribution of ESA based on perceptions of its value to the public sphere and society at large within the totality of human value categories. What is striking in the results is that the profiles of responses were very similar from the two independent surveys undertaken in different countries by different researchers. At the NSE Forum in Rome, it was stressed to respondents that the survey was designed, implemented and framed by the completely independent APSU at UCLan.

An important element of a public value approach is the concept of the public sphere – the wider contribution public value makes to the scope, structure and substance of socio-political space. To benefit from value produced by ESA, for example, you do not have to work for it, or be a supplier or travel into space. As we shall see, ESA produces public value, to a greater or lesser extent, across the board in all categories of human value. An overarching definition of the public value contribution of an organisation is, simply put, its contribution to the public sphere.

The overarching approach we use in this report is informed by the work of Mark Moore (1995) whose approach to strategic public value management comprises three elements: the realisation of actual public value outcomes (to which we turn to next); the authorising environment of an organisation in which public value may be seen as a mandate-relevant resource; and operational capacity reflecting the importance of operational processes, policies and controls and the polycentric nature of the public policy environment in which relationships between organisations, publics and politics are key. This approach is discussed in Chapter 2.

The public value 360 research and implementation approach for an organisation to measure and maximise its public value profile we have developed in ESA_LAB@UCLan with ESA and separately with other collaborators in real-world case studies comes essentially in two parts. Firstly, it is about defining and measuring public value or what Moore refers to as value in the task environment in the diagram above. This is based upon external assessments of the value perceived to be produced by an organisation and, following Meynhardt (2009), this is based upon assessments of value made by ordinary citizens.

The second public value *management* element of our approach gives an appreciation of the dynamics of public value as an asset for an organisation within its policy environment, and an appreciation of public value as a currency in the political economies within the authorising environments in which organisations exist. It also focuses upon how an organisation must act, interact and react to optimise its value as perceived by the public.

This second element of the ‘360’ approach covers the organisational implications of working with and within public value both at a strategic and an operational level. This takes into account the realities of networks and collaborations in the delivery of outputs and the realisation of outcomes, and the sometimes-vital role a public value profile plays in the defence of an organisation’s mandate in its authorising environment.

Turning to the ‘public’ in public value reveals the breadth of the concept. Following Ostrom et al (1961) the ‘public’ may be envisaged as those who are touched by the indirect, positive, consequences of an organisation’s outputs. Today, the public sphere may, in this era of globalisation, satellite communications and the internet, be very broad indeed and the public value of an organisation may be equally expansive. In a globalised, interconnected world, the boundaries of an organisation, and its impact, can extend well beyond territorial jurisdictions and commercial and contractual relationships. At the same time, the impact of an organisation extends to a wider public affected by the indirect consequence of its outputs and outcomes in ways which may be unforeseen and unappreciated.

Thinking of organisational implications of the ‘public’, a public value perspective brings into view the boundary issue of an organisation. There are two elements to this. Firstly, the hybrid nature of public policy and projects results in collaborations between organisations and across sectors; and secondly the engagement of citizens, communities and collaborators in the co-production and co-design of public facing outcomes.

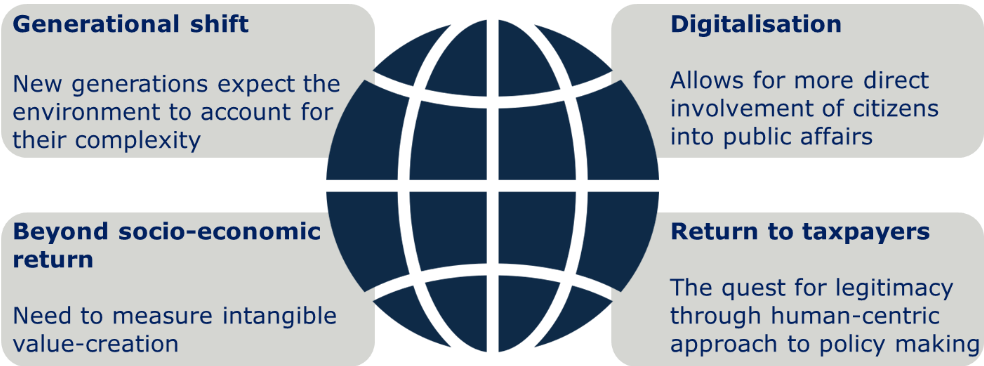
This approach is based upon a proven, tested framework of human values and the needs and motivations underpinning them. In it we use two leading approaches (Datler 2013) to value measurement and interpretation, those of Shalom Schwartz (2012a; Schwartz et al 2012b) and Ronald Inglehart (1977, 1981, 1985, 1990) which together give a robust assessment of public value outcomes based upon human needs, values and underpinning motivations together with an analytical framework for its interpretation.

Public value in the space sector – Unearthing value creation

Public institutions faced with more pressure

The evolution of generational perspectives on value creation is an important aspect to consider. Baby-boomers saw value creation as the possibility to choose freely. The generation that followed was educated and came to value personal choice and valued engagement in policy and public consultation prioritising self-expression and freedom of choice as value priorities (Inglehart 1990). Nowadays, advances in technologies allow for facilitated communication channels between public institutions and society and a reconfiguring of civic involvement mechanisms. New generations have more opportunities to participate in public discourse, but also have a lot more expectations for the environment to account for their complexities. This leads to a situation where international and inter-governmental organisations are strongly encouraged to become more transparent, effective and to engage in direct exchanges with the public if they do not want to become unpopular. Measuring value creation using a public value approach allows for the evaluation of trans-utilitarian value relating to elements, which are hard to quantify – such as knowledge, curiosity and culture – but are of particular relevance to society, and especially when it comes to the space sector.

Figure 9.2: Evolution in citizen's expectations



Assessing intangible value creation in the space sector

Space activities provide much more than simply quantifiable performance indicators associated with tangible outputs. They span so many areas that it is difficult to find the one single value for space. Current econometric assessments are weak in valuing investments in space and do not effectively capture the qualitative or intangible benefits. From human space flight to satellites for various purposes (including for scientific navigational, or communication purposes) or for exploration of other planets, the rockets themselves and more, space provides identity and authenticity, and also fascination and inspiration for young people. However, as for technology and innovation in general, investments in the space sector are often risky in nature and depend mostly on an expectation of the value return, as returns on investments tend to be long term. Therefore, failing to capture the full benefits of space – beyond traditional economic returns – could potentially lead to underinvestment.

ESA's Mission

Ensuring the public's faith for the spinoff benefits of space and shedding light on the multiplier effect of this is very important if we want to continue to grasp the full spectrum of possibilities that space has to offer. ESA is a complex organisation. National member states and the European Union contribute to the budget of the agency thanks to the money they receive from taxpayers and that is entrusted to the organisation with the mandate to work on activities for the benefits of society (figure 9.3). To this end, ESA has tried to come up with a different way of looking at an organisation. Against the usual ex-post methodology of 'decide, announce, defend', ESA now looks at the ex-ante, and secures the legitimacy of its projects by interacting with the public, proactively and inclusively. In line with its strategy to become a more agile and effective organisation, this approach is a subtle but full-frontal assault on the new public management paradigm. This assessment will allow the agency to draw from it and make this work in the public sphere for debate and for governmental funding decisions.

Figure 9.3: 1 Assessing the Value of ESA: ESA PV Profile

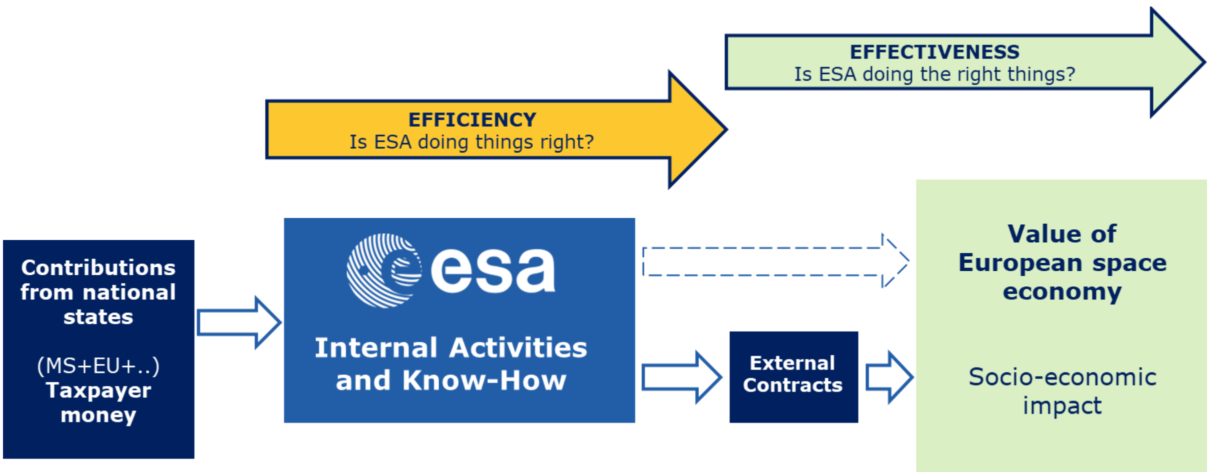


Figure 9.4: An overview of the human values and how they translate into practical examples for the space sector and for ESA. This translation is an important step to build a bridge between the different lexicons and to establish common ground for discussion.

	Human Value	General Definition	Practical Application Example (ESA)	Propositions in the questionnaire
Openness to change	**Self-direction – Action**	Freedom to act on its own	Twin roles of Space Situational Awareness and Space Control secure the freedom to act in space	Provides information and opportunities for citizens to explore and achieve new things
	Self-direction – Thought	Freedom to think on its own	Vast amount of data from Copernicus enables decision makers with analysis of climate change variables	Gives citizens inspiration, information and insights which engage their imagination and encourage them to develop new ideas
	Stimulation	Excitement, novelty, change	Moon village, Mars exploration	Creates excitement and suggests new and novel challenges
	Hedonism	Pleasurable experience	Watching a launch from Kourou or online	Creates appealing and interesting images and information involving space (i.e. Apollo launch)
Self-enhancement	**Power – Dominance**	Power through exercising control	Power given to the Member States (resource allocation on projects they want)	Enhances member nations authority and influence over people, policy and politics within space and related domains
	Power – Resources	Material and social resources	Control from Member states over allocated resources (i.e. geo-return)	Gives member nations control over material, technical and social resources associated within space
	Achievement	Pathways to personal success	Reaching Rosetta	Creates opportunities for individual and institutional achievement
	Face	Sense of pride and identity	Prestige of sending life into space (i.e. astronauts, dogs)	Makes an important contribution to European image and identity and the status of member states
Conservation	**Conformity – Interpersonal**	Avoiding harming other people	Clean Space Initiative (Space Debris)	Promotes recognition of the integrity and need for balance and harmony in human society
	Conformity – Rules	Compliance with rules	ESA-EU partnership, ESA Convention , ESA internal law: staff regulations, rules and instructions	Helps ensure compliance with rules, laws, and formal obligations in space

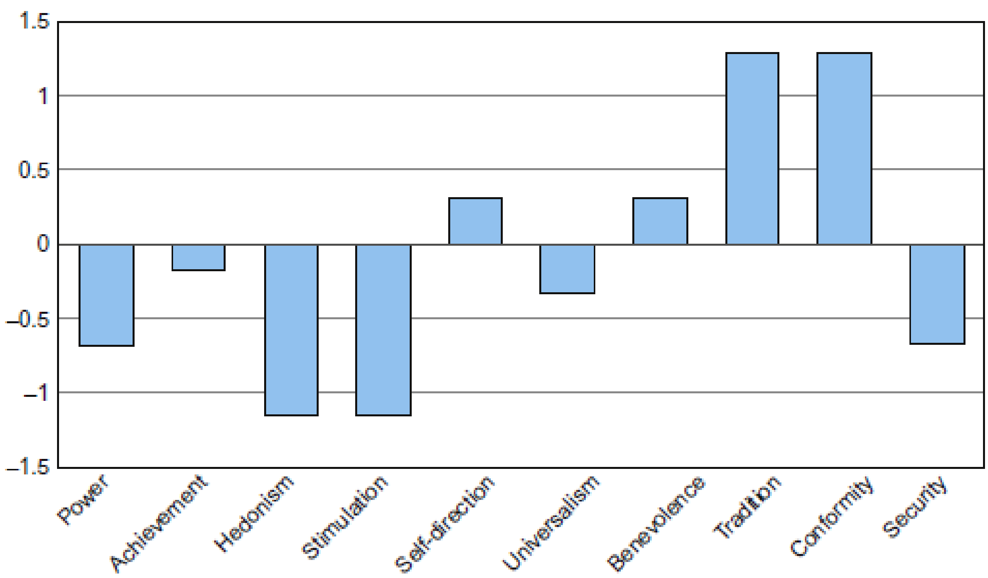
	Security – Personal	Safety in immediate environment	Navigation/telecommunication	Gives us technologies and information for activities in space to make individuals' lives safer and healthier on Earth
	Security – Societal	Safety from global hazards	ESA's contribution to SDG's – monitoring natural disasters, Space Safety and Security (SSA), technology transfer	Gives us technologies and information to make society more stable, secure and sustainable
	Tradition	Maintain and preserve cultural, family or religious traditions	ESA is set to act for peaceful purposes and conforms to its mandate	ESA contributes towards stability in daily lives and the preservation of traditional social and political arrangements
	Humility	Recognising one's insignificance in the larger scheme of things	The iconic picture of the Earth from the moon provides sensibility towards the care for our planet	Makes us aware of humanity's place in the cosmos
Self-transcendence	**Universalism – Concern**	Promotion of equality and justice and protection for all	ESA is an enabler for cooperation in the international community (i.e. giving access to data, ISS cooperation, protection of our planet)	Promotes a global view of equality, justice and protection of all people
	Universalism – Nature	Protection of the environment	EOP Copernicus programme	Promotes an awareness of the global environment and contributes to its protection
	Universalism – Tolerance	Openness to diversity	Promote diversity of fields and competences involved	Promotes global understanding and tolerance for all human society
	Benevolence – Caring	Welfare of in-group members	Human resources, corporate social responsibility	Is committed to the welfare of the individuals and institutions with whom it is involved
	Benevolence – Dependability	Reliable/trustworthy member of a group	Being reliable to stakeholders, the space community, and suppliers	Is a trustworthy organisation embedded in the European family of nations

Space safety, human performance and astronaut's psychological resilience: a micro-level case study

Value profile of an astronaut

Schwartz's recognised framework for studying values also applies to space-related research. In a study on space safety and human performance, Sandal et al (2018) explain how personal values can provide valuable information on individual's motivations when choosing to pursue certain activities. Furthermore, those values also provide an effective measure for the management and counteraction of stress for crewmembers during a spaceflight. The study highlights that motivational goals help understand the sensitivity of crewmembers to various mission stressors and that similar value profiles represent a platform for interpersonal compatibility. Using data from a large sample of studies, they measure the personal value profile of an ISS cosmonaut prior to a 6 month mission as shown in figure 9.5 below.

Figure 9.5: Personal value profile of an International Space Station Cosmonaut prior to a six-month mission



The profile overall reveals that the respondents in the above group (ISS Cosmonauts) respects and accepts customs and cultural norms (traditions) and conforming to norms and rules (conformity). It also shows the positive association with maintaining interpersonal relations (benevolence) and a freedom to think and act (self-direction).

Behavioural insights to performance management

The cognitive dissonance theory (Festinger, 1957) posits that as an individual notices differences between his pre-existing values and attitudes and his actions, they will try to eradicate this dissonance. This theory has been particularly used in the field of behavioural economics and can provide valuable insights when assessing human performance and motivation at work. Indeed, the congruence between personal values and the work environment has significant implications for work satisfaction. Studying a space simulation, Sandal et al (2011), show that mission crewmembers whose value priorities emphasised 'hedonism' expressed strong discontent with in-flight nutrition and even lost weight before alternative food was offered to them!

Value differences can also affect the overall performance of space missions, and studies have demonstrated that diversity in teams can have implications for cohesion and conflict variables in the process. Woehr et al (2013) found that diversity in self-direction, achievement and benevolence notably affected such variables. This was further proved during a space simulation where tensions between crewmembers arose from diversity in those values.

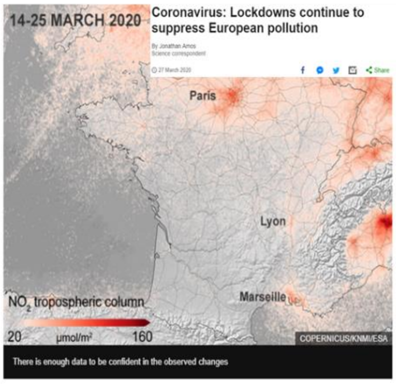
Thus, assessing the value profile of an organisation concerning its employees can benefit the overall performance of the organisation. Further analysis can be done at the micro-level to provide better team management.

A practical example of public value creation: space in response to Covid-19

The World Health Organization (WHO) reported on the 16 May 2020, that the number of recorded cases of Covid-10 was more than 4 ,248, 389 worldwide and 292, 046 people have lost their lives. Moreover, the alarming levels of spread and severity led WHO to characterise Covid-19 as a pandemic.

Through its many applications, space as the potential to provide valuable responses to the Covid-19 crisis as presented in the diagram below. Those solutions can further illustrate the ERG model (existence – relatedness – growth).

Figure 9.6: Space in response to Covid-19 following the ERG model



Satellite Navigation (SatNav) can:

Enable applications in the virtual' and 'augmented' reality environment;

Validate access to training/learning content based on the location of the school pupils (at all levels) in real-time for access to earning;

Support epidemiological analysis and cross-certification of data.

Satellite Communications (SatCom) can:

Provide connectivity where terrestrial communications are insufficient;

Enable remote monitoring through the transmission of data from out of the way places;

Provide a backup for terrestrial systems.

Satellite Earth Observation (SatEO) can:

Provide contextual situational awareness for epidemiological mapping;

Provide the collection of data for the production of images and maps, eg to provide relevant parameters for the VR/AR environment used for specific learning packages such as those involving geographical maps, historical sites etc.

Assessing the public value profile of ESA

ESA citizens' debate on space for Europe

An illustration of how ESA was able to assess its public value towards the public at large was the experience it had with the "Citizens' debate on space for Europe".

In 2016, ESA organised the first informed debate between a space agency and its main stakeholders: the taxpayers and citizens. Regarding ESA, this debate was conceived of to get from citizens, elements of information and inspiration for drawing up the future space strategy for Europe. In terms of governance, it is important to note that this debate, while being an illustration of participatory democracy, was not meant to interfere with the institutional decision-making process of ESA, but rather to nurture and support it.

More than 1600 citizens dedicated a whole day (10 September 2016) to gather and discuss issues relating to space after having been given information through magazines and videos. The citizens subsequently answered a questionnaire comprising both closed and opened questions. They also undertook a simulation that gave them the opportunity to build and plan a space mission for 2036.

When the citizens' debate took place, the inspirational dimension of space was tangible and the young generation was very much dedicated to the discussions and were enthusiastic about the matter. Space represents opportunities in many sectors and hope for the future and this debate demonstrated this. With this citizens' debate ESA opened up a new chapter of the space adventure.

Two Interactive studies on how passionate and concerned Europeans are about space and its challenges

In 2018 and in 2019, the ESA Communication Department organised a survey with Harris Interactive in support of the Council at ministerial level Space 19+. Debate: A more substantiated discussion with qualitative elements.

The 2018-19 study probed how much European citizens know about space? It was carried out online with a sample of 5,395 Europeans, comprising 5 representative samples of the national population aged 18 or over in each of the following countries:

Germany: 1,062 people;

France: 1,054 people;

United Kingdom: 1,064 people;

Italy: 1,138 people;

Spain: 1,077 people.

At the request of ESA, and 9 months after an initial survey, Harris Interactive interviewed for the second time the inhabitants of Europe's five most populous countries to better understand the image they have of, and their expectations for, space activities. There were four broad categories of findings.

Firstly, if space activities are perceived positively it is also because they are associated with indirect economic benefits, even if this is not a priority

At the end of 2018, 90 per cent of Europeans had a positive opinion of space activities in general. This positive perception is based on both scientific and tangible (that is to in the public domain) factors. Hence, space activities are thought to provide a better understanding of the universe (93 per cent), as well as pave the way for technologies that improve everyday life (especially satellite navigation, 89 per cent).

The 2019 study identifies more specifically the indirect benefits that Europeans associate with space activities, particularly on an economic level. Seventy nine per cent of Europeans believe that this enables engineers involved in these space projects to improve their expertise, while 70 per cent believe that the data made available by space activities can be used to develop artificial intelligence solutions. More than 7 out of 10 Europeans believe that European space activities have a significant impact in Europe in several areas, including with regard to the development of new technologies by European businesses, the development of the European economy, and relating to the daily use of new technologies by European citizens.

Although this was a relatively minor concern compared to identifying the effects of global warming, which was the overriding priority for Europeans, last year the exploration of the solar system was a major priority in the eyes of the general public (84 per cent). Notably, Europeans believe the robotic exploration mission to Mars is slightly more important (58 per cent) than sending astronauts to the red planet (53 per cent) or to the moon (53 per cent).

Secondly, the challenges related to space security imply a collective responsibility that goes beyond the strict framework of states that are active in space

This new survey clarifies the significance that Europeans place on a threat that could put the future of humanity at risk: 83 per cent of those questioned believe that European space activities should give priority to developing methods to divert asteroids heading towards Earth. This is a threat that was considered significant by three quarters of Europeans.

Another threat deemed significant by more than 3 out of 4 those surveyed, space debris, is also the subject of a specific question in this survey. Europeans expect a joint mobilisation of both public and private authorities to tackle space debris, with 73 per cent believing that the major space powers are responsible for cleaning up space debris orbiting Earth, even if it has been created by private space missions. However, 71 per cent of Europeans also think that private companies should be involved in the clean-up.

Thirdly, European cooperation in space activities appears to be a necessary condition for competing against other major powers, an important framework to protect the personal data of European citizens, and an effective means of strengthening links between countries

In the survey, the pooling of European space activities seemed almost taken for granted, with 91 per cent thinking it is important, and a vast majority view in all countries, including the United Kingdom (85 per cent), which was still in the midst of the 'Brexit' process during the survey.

This survey also helps to explain the reasons that drive Europeans to call for European space cooperation more clearly, as it shows that a majority of Europeans (70 per cent) believe that the pooling of space activities on their continent allows Europe to compete with the major space powers. This desire to be competitive is slightly stronger than the desire for independence in principle for the major European powers, which is nevertheless a high expectation for two-thirds of Europeans (64 per cent).

Notably, the issue of the independence of European space activities is not perceived in a completely consistent way. The argument with the most support for European independence in space matters concerns personal data, as 82 per cent of Europeans consider it important for European countries to be able to protect the confidentiality of their citizens' personal data, a slightly more marked requirement than that of having independent access to space via their own space infrastructure (74 per cent).

So, does European cooperation in space activities pay off? The answer is 'yes', according to 80 per cent of Europeans, who believe that the development of European space activities has a major positive impact on cooperation between European countries.

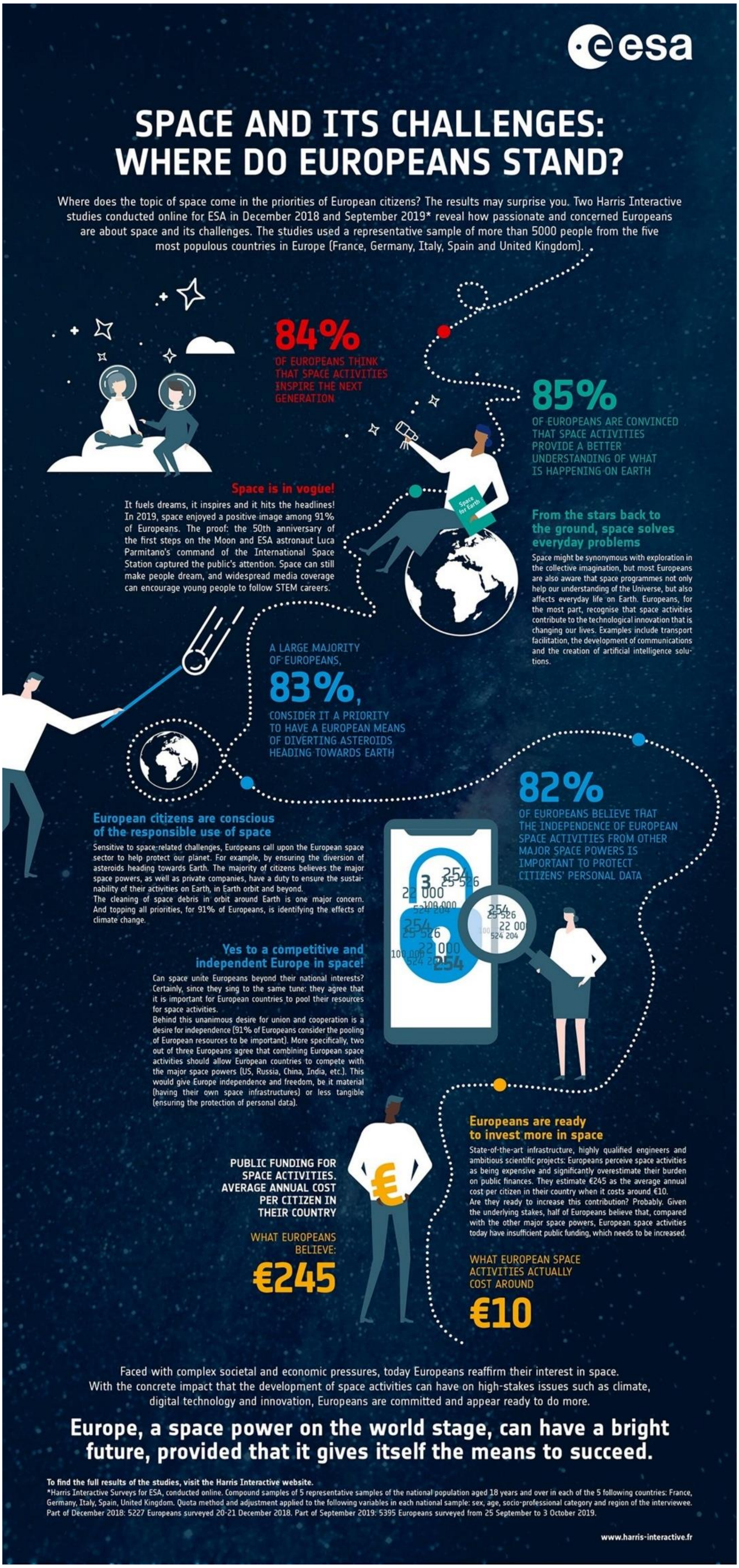
Finally, Europeans still have an unclear idea of how much public funding European space activities receive, but they do not believe that public funding is excessive, in fact quite the contrary …

The survey conducted in December 2018 made it possible to pinpoint the difficulties Europeans have in estimating how much public funding European space activities receive. When asked how much of their taxes went towards space activities each year, the general public provided an answers of €245 on average, which is far removed from the real figure, which is less than €10 on average each year. It must be noted that this difficulty for Europeans to estimate how their taxes are used is probably not specific to space activities but is probably applicable to all areas of public spending.

This finding of Europeans' overestimation of the cost of space activities raises the question of whether Europeans believe that the continent's space activities receive too much public funding, especially when compared to their main competitors. The answer is a clear 'no', since only 16 per cent consider that these funds are currently excessive. On the contrary, 1 in 2 Europeans (50 per cent) believe that European space activities receive insufficient public funding compared to other major space powers.

This survey thus provides a better understanding of the basis of Europeans' positive opinions towards space activities, that a clear majority of the general public mainly associate with concrete economic benefits. The general public is also aware of the issues of collective responsibility in space security and cooperation between European countries. The public funding available for European space activities does not appear to be excessive in light of these many benefits.

Figure 9.7: Public domain summary of Harris Survey findings

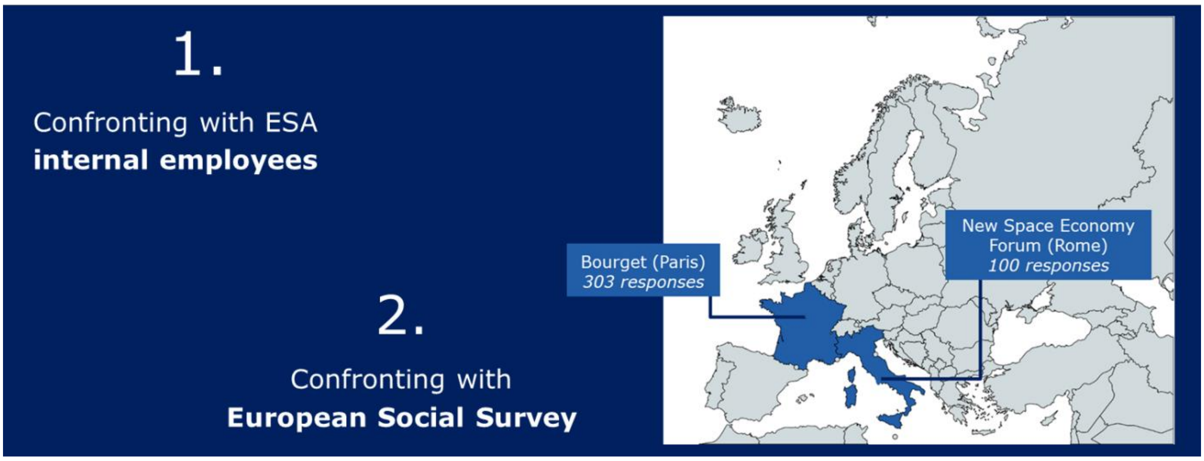

esa
SPACE AND ITS CHALLENGES: WHERE DO EUROPEANS STAND?
Where does the topic of space come in the priorities of European citizens? The results may surprise you. Two Harris Interactive studies conducted online for ESA in December 2018 and September 2019* reveal how passionate and concerned Europeans are about space and its challenges. The studies used a representative sample of more than 5000 people from the five most populous countries in Europe (France, Germany, Italy, Spain and United Kingdom).
84%
OF EUROPEANS THINK THAT SPACE ACTIVITIES INSPIRE THE NEXT GENERATION
85%
OF EUROPEANS ARE CONVINCED THAT SPACE ACTIVITIES PROVIDE A BETTER UNDERSTANDING OF WHAT IS HAPPENING ON EARTH
Space is in vogue!
It fuels dreams, it inspires and it hits the headlines! In 2019, space enjoyed a positive image among 91% of Europeans. The proof: the 50th anniversary of the first steps on the Moon and ESA astronaut Luca Parmitano's command of the International Space Station captured the public's attention. Space can still make people dream, and widespread media coverage can encourage young people to follow STEM careers.
Space for Earth
From the stars back to the ground, space solves everyday problems
Space might be synonymous with exploration in the collective imagination, but most Europeans are also aware that space programmes not only help our understanding of the Universe, but also affects everyday life on Earth. Europeans, for the most part, recognise that space activities contribute to the technological innovation that is changing our lives. Examples include transport facilitation, the development of communications and the creation of artificial intelligence solutions.
A LARGE MAJORITY OF EUROPEANS,
83%,
CONSIDER IT A PRIORITY TO HAVE A EUROPEAN MEANS OF DIVERTING ASTEROIDS HEADING TOWARDS EARTH
82%
OF EUROPEANS BELIEVE THAT THE INDEPENDENCE OF EUROPEAN SPACE ACTIVITIES FROM OTHER MAJOR SPACE POWERS IS IMPORTANT TO PROTECT CITIZENS' PERSONAL DATA
European citizens are conscious of the responsible use of space
Sensitive to space-related challenges, Europeans call upon the European space sector to help protect our planet. For example, by ensuring the diversion of asteroids heading towards Earth. The majority of citizens believes the major space powers, as well as private companies, have a duty to ensure the sustainability of their activities on Earth, in Earth orbit and beyond.
The cleaning of space debris in orbit around Earth is one major concern. And topping all priorities, for 91% of Europeans, is identifying the effects of climate change.
Yes to a competitive and independent Europe in space!
Can space unite Europeans beyond their national interests? Certainly, since they sing to the same tune: they agree that it is important for European countries to pool their resources for space activities.
Behind this unanimous desire for union and cooperation is a desire for independence (91% of Europeans consider the pooling of European resources to be important). More specifically, two out of three Europeans agree that combining European space activities should allow European countries to compete with the major space powers (US, Russia, China, India, etc.). This would give Europe independence and freedom, be it material (having their own space infrastructures) or less tangible (ensuring the protection of personal data).
Europeans are ready to invest more in space
State-of-the-art infrastructure, highly qualified engineers and ambitious scientific projects: Europeans perceive space activities as being expensive and significantly overestimate their burden on public finances. They estimate €245 as the average annual cost per citizen in their country when it costs around €10.
Are they ready to increase this contribution? Probably. Given the underlying stakes, half of Europeans believe that, compared with the other major space powers, European space activities today have insufficient public funding, which needs to be increased.
PUBLIC FUNDING FOR SPACE ACTIVITIES. AVERAGE ANNUAL COST PER CITIZEN IN THEIR COUNTRY
WHAT EUROPEANS BELIEVE:
€245
WHAT EUROPEAN SPACE ACTIVITIES ACTUALLY COST AROUND
€10
Faced with complex societal and economic pressures, today Europeans reaffirm their interest in space. With the concrete impact that the development of space activities can have on high-stakes issues such as climate, digital technology and innovation, Europeans are committed and appear ready to do more.
Europe, a space power on the world stage, can have a bright future, provided that it gives itself the means to succeed.
To find the full results of the studies, visit the Harris Interactive website.
*Harris Interactive Surveys for ESA, conducted online. Compound samples of 5 representative samples of the national population aged 18 years and over in each of the 5 following countries: France, Germany, Italy, Spain, United Kingdom. Quota method and adjustment applied to the following variables in each national sample: sex, age, socio-professional category and region of the interviewee. Part of December 2018: 5227 Europeans surveyed 20-21 December 2018. Part of September 2019: 5395 Europeans surveyed from 25 September to 3 October 2019.
www.harris-interactive.fr

Surveys versus citizens' debates cannot give the same type of results. Surveys or polls are snapshots at a given moment based on questions and answers compared to more qualitative elements gathered after a longer discussion based on an informed debate when it comes to citizens' debates. The format, methodology, representativeness is different. In particular, the ESA citizens' debate participants were from the 22 ESA Member States (against 5 in the surveys undertaken by Harris Interactive). Notably however, the general thrust of citizens' interests, priorities, hopes and concerns are convergent in the results from both the ESA citizens' debate and from the surveys.

Approach used for assessing ESA public value

In order to assess ESA's public value profile, this study used a questionnaire with 19 statements with propositions related to each one of the 19 Human Value categories from the Schwartz maximal list of categories (Schwartz et al 2012). These statements describe how ESA activities may be seen as contributing to value in the public sphere, and respondents were asked to assess, on a scale from one to five (i.e. responding 'strongly disagree', 'disagree', 'neither', 'agree', 'strongly agree'), the perceived contribution of ESA with respect to different value categories. As discussed in chapter 2 these are in a sense 'public' values in that they are universal (Schwartz 2012) and have a wide, cross-cultural and cross-national relevance. But that said they will prioritised differently at group and individual levels – they may be recognised though not regarded equally universally. What we are probing are perceptions of value deriving from ESA's activities. It is stressed that this is not an assessment of ESA's performance, nor is it an opinion poll. Rather, this project gives appreciation of the public value of ESA among informed citizens in respect of its contribution by human value categories.

Figure 9.8: 2 Overview of the Methodology of Analysis



The share of respondents answering 'agree' and 'strongly agree' to each statement/human value is used as an indicator of how well ESA performs with respect to each value. This provides an initial public value profile of ESA as a first step of the study. The two following steps are a matter of comparison of these initial external results. The first comparison is performed with internal results, collected with the same questionnaires but surveying ESA staff and contractors on various sites. The second comparison is performed with the European Social Survey, used as an indicator of citizens' expectations.

Analysis of the population (internal and external)

A minimal level of awareness from respondents with respect to ESA's activities and the space sector in general is necessary in order to obtain not only accurate, but also significant and relevant answers. Therefore, respondents were targeted specifically at the Paris (at the International air show at Le Bourget) and Rome (at the New Space Economy Forum) events because they were not simply the 'man on the street' but informed citizens, which have the capacity to provide accurate and informed answers to the questionnaire. Indeed, out of the 303 respondents in le Bourget, more than 55 per cent were active in the space and aeronautics sectors and, out of the 100 respondents in Rome, more than 75 per cent were active in the space and scientific research sectors. The samples from each of the areas were quite different. While 62.7 per cent of respondents at Le Bourget were French nationals whilst 64.6 per cent at Rome were Italian, regarding the age of respondents, respondents in Le Bourget were much younger (42 per cent were under 24) whilst those in Rome were more widely spread across all working age ranges.

Regardless of these differences, the shape of the responses overall was broadly the same, with only a few notable differences. From a space policymaking standpoint, it may be that there are differences in the policy perspectives of the two cohorts at Le Bourget and those in Rome, which was explicitly following the new space economy commercial-led space agenda. On the downside, the number of respondents to our questionnaire is relatively low and could constitute a limit to our study.

Figure 9.9: *Sectors of external respondents, in Le Bourget and Rome surveys*

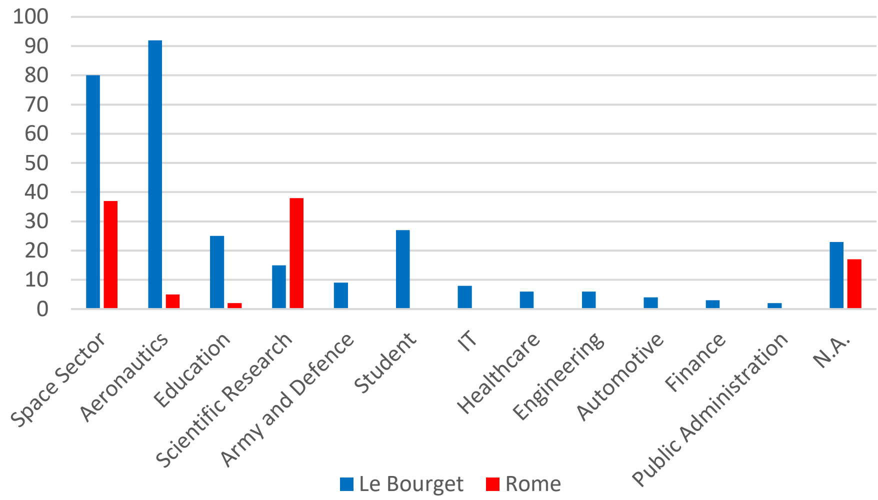
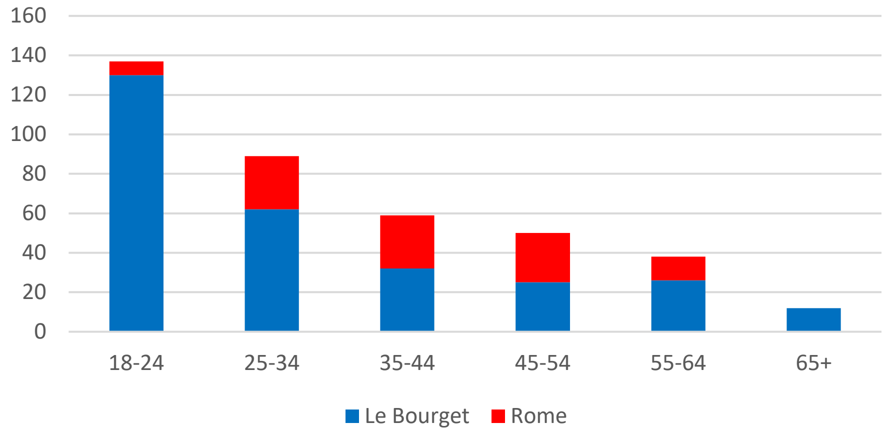
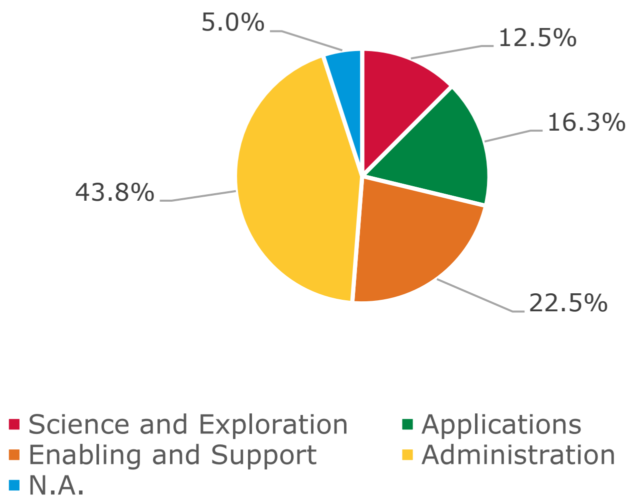


Figure 9.10: *Ages of respondents in Le Bourget and Rome* surveys



Meanwhile, the internal survey collected 80 respondents over various ESA sites. The most represented are respondents from ESA headquarters in Paris, but those working in administration and in other areas also have a fair representation (see figure 9.11).

Figure 9.11: *Distribution of internal respondents across ESA areas*



Interpretation

The results of the study are plotted on the radar diagrams below, first summarised into the four main categories of human values and then in the more detailed 19 Human Values.

Figure 9.12: *ESA's public value profile*

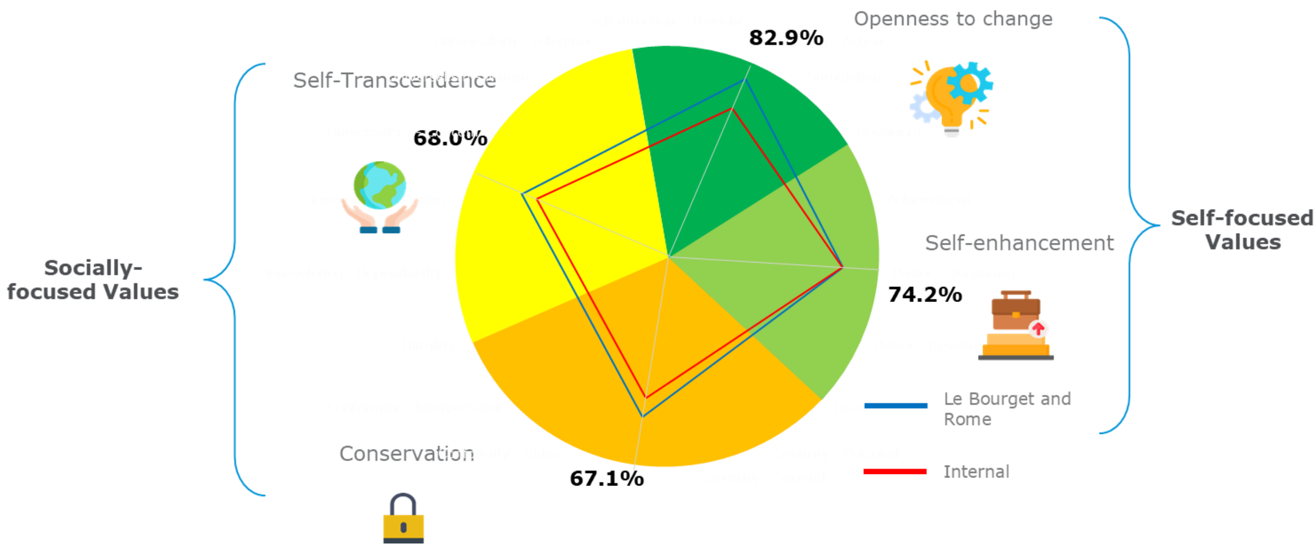
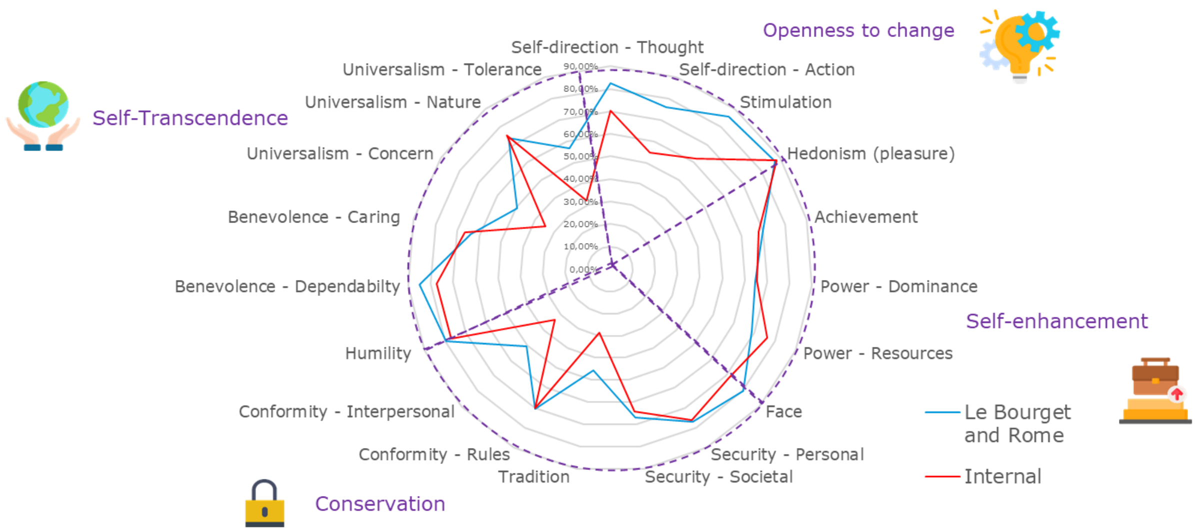


Figure 9.13: *ESA public value profile across Schwartz's 19 value categories: Internal vs. External samples*



These graphs reveal overall that ESA has a positive public value profile with positive responses overall in all 19 Schwartz value category areas and summarised above in the four main second order categories. Perhaps the most striking overview impression is that the shapes of external and internal plots generally follow the same pattern, or trend, with the exception that internal respondents were slightly more critical with regard to ESA's performance than respondents from Le Bourget and Rome. The shape of the show that greater value is perceived in 'self-focused' human values than in 'socially-focused' human values.

From these results, we see that ESA is perceived as making a significant contribution to value realisation across all 19 human values in the extended Schwartz framework. However, the two categories associated with the focus on one's self ('self-enhancement' and 'openness to change') score higher among all respondents across both subsamples. We stress that overall, these are positive results, and it is just that there are significant differences between them.

Comparison to the European Social Survey

The European Social Survey (ESS) is a database updated every two years constituted of data collected through surveys regarding attitudes, beliefs and behaviours in every European country. In particular, a section of the ESS includes a 21-item human values scale designed by Shalom Schwartz et al (2012). Comparing the results of our analysis of ESA's public value profile to the results obtained by the ESS in the countries where our surveys were undertaken would provide additional interesting insights on ESA's public value profile.

The next step of the study is a comparison of ESS data with the data collected through the external surveys. In order to do so, the first step was to turn the 21-item Human Values scale of the ESS into a scale comparable to the 19-item human values scale used in this study. This first meant finding equivalent values from one scale to the other, as they are formulated differently, and then removing two values from the 21-item scale. The values which have been removed are the ones which were too similar to other values in the same scale and not specific enough. The following table details how equivalent Human Values were determined.

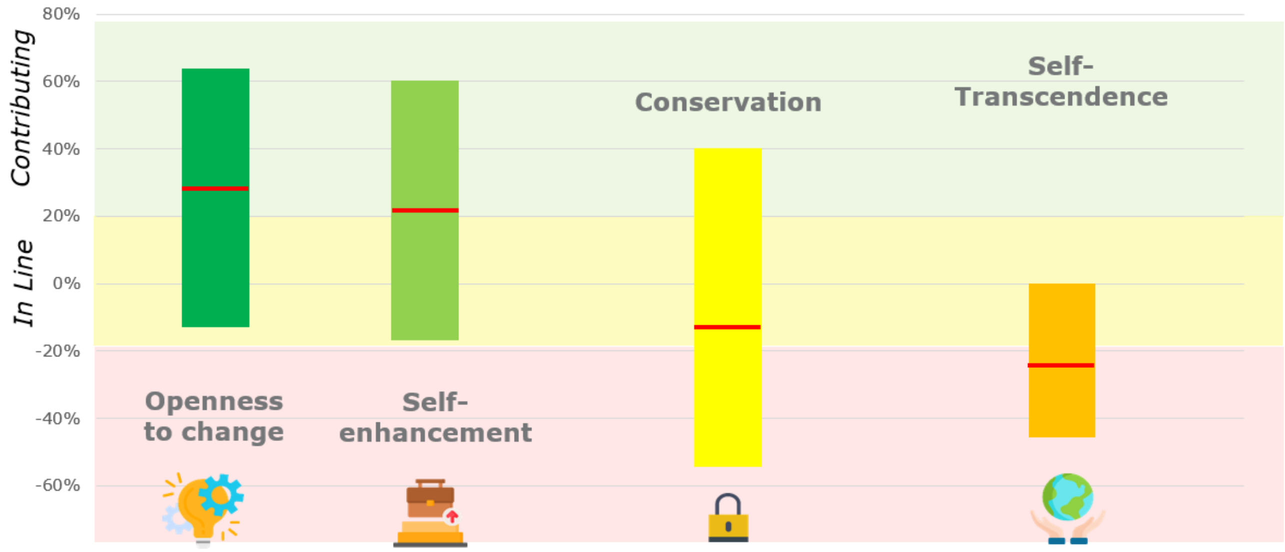
Figure 9.14: Table showing European Social Survey categories compared with the *Schwartz 19* (Schwartz et al 2012) categories used in the ESA public value survey.

ESS' expression of the Human Values	**Schwartz's 19 values equivalents**
Important to be successful and that people recognize achievements	Achievement
Important to help people and care for others' wellbeing	Benevolence – Caring
Important to be loyal to friends and devote to people close	Benevolence – Dependability
Important to behave properly	Conformity – Interpersonal
Important to do what is told and follow rules	Conformity – Rules
Important to show abilities and be admired	Face
Important to seek fun and things that give pleasure	Hedonism
Important to be humble and modest, not draw attention	Humility
Important to get respect from others	Power – Dominance
Important to be rich, have money and expensive things	Power – Resources
Important to live in secure and safe surroundings	Security – Personal
Important that government is strong and ensures safety	Security – Societal

Important to make own decisions and be free	Self-direction – Action
Important to think new ideas and being creative	Self-direction – Thought
Important to seek adventures and have an exciting life	Stimulation
Important to follow traditions and customs	Tradition
Important that people are treated equally and have equal opportunities	Universalism – Concern
Important to care for nature and environment	Universalism – Nature
Important to understand different people	Universalism – Tolerance
Important to have a good time	*Removed*
Important to try new and different things in life	*Removed*

This conversion from one scale to another allowed us to have data that is comparable with the data collected through our questionnaires. Using the results of the recent European Social Surveys for France and Italy as an indicator for citizens' orders of preference, and thus expectations in these countries, and by subtracting this data, for each human value, to ESA's performance measured by our questionnaires, we present the data in the graphs below, grouped into four categories and then in detail for Le Bourget and Rome. This gives an insight based upon a comparison between the expectations of citizens revealed in the ESS data seen against the perceptions of the two groups surveyed in our polls in Rome and Paris. More specifically, for each human value, we obtain the difference in percentage points between the share of respondents in France or Italy who, according to the ESS, view a certain human value as a priority, and the share of respondents of nationality of the two countries, respectively, in Le Bourget or in Rome, who view ESA as performing well with regard to the same value. It is therefore possible to clearly see whether ESA over-performs or under-performs with respect to each value. If, for a certain value, the result is positive, as is the case, for example, for 'stimulation', ESA is contributing to the Value. On the other hand, if the result is negative, as is the case for 'tradition', ESA is under-performing.

Figure 9.15: *ESA's performance* in respect of *citizens' expectations in percentage points*



The above table reveals that ESA are perceived to make a positive contribution regarding value in the categories that emphasise '*Openness to change'* and '*Self-enhancement*', as expectations of citizens are exceeded in these categories. Regarding values that emphasise '*Conservation*', ESA's public value performance is generally in line with citizens' general prioritisation from the ESS data. However, regarding values that emphasise *'Self-transcendence',* the performance of ESA may be regarded is slightly below citizens' value priority in that category.

Reflections on the result

This collaborative project under the auspices of ESA_LAB@UCLan has created and implemented a framework for the measurement of the public value contribution of ESA. This approach to public value looks at the contribution an organisation makes to the common good and the public sphere and is based upon an underlying set of human value categories assessed using proven theories and methods. Using this approach, we have assessed public value using an ontology of values based on leading theory of human values (Schwartz et al 2012). We stress that this is not a public opinion poll. Rather, it gives an appreciation of the contribution ESA is perceived to make to the common good among the sample of respondents who undertook a questionnaire survey and who were a particularly informed group of respondents. These findings reveal a very significant level of perceived contribution of ESA to the public sphere within the scope of the totality of human value and motivational categories. These values are important in that they underpin a contemporary worldview built upon security and associated with affluence and self-direction.

It may be that responses to these propositions reflects the prevailing discourses relating to the space sector. Certainly, the narrative of the new space economy does not appear to focus on public goods and the contributions to daily lives in the public sphere. It may be revealing that responses to our recent public value appraisal of the nuclear industry in west

Cumbria are in some respects broadly similar in profile to those relating to ESA. The 'radar diagram' in Chapter 10 provides an overview of the public value profile of the nuclear industry in west Cumbria. Broadly similar patterns of perceived value contribution performance can be observed. We hypothesise that this could be explained by the fact that the space sector and the nuclear sector both involve technologically intensive, large-scale and often very 'political' projects.

Potential Covid-19 impacts on the study and the results

Public value focuses on human values. The set of values is shared among individuals. However, the prioritisation differs depending on the time and the setting. In the case of Covid-19, the setting is changing constantly. Therefore, while the overall results on the value profile of ESA will not change, its performance with regards to the European Social Survey will be changing over time as individual value priorities evolve.

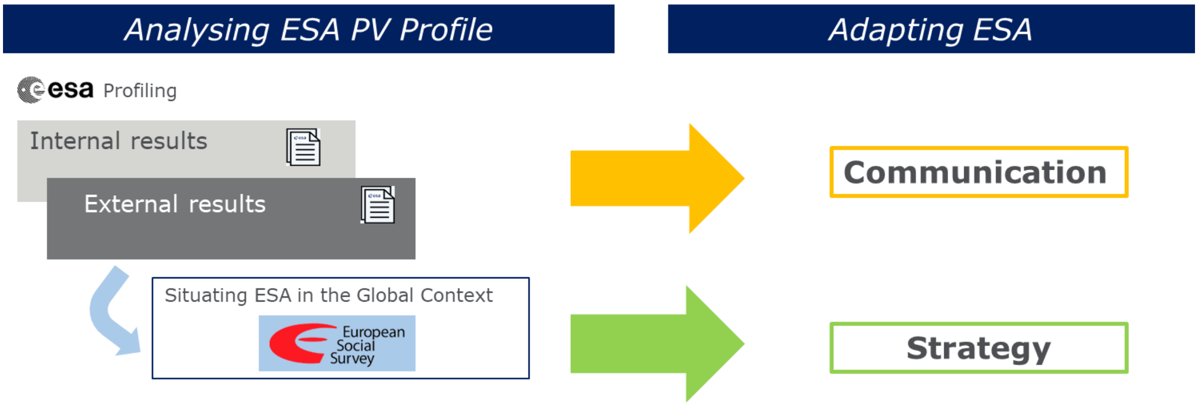
At a time of Covid-19 in which wider risk perceptions similar to Ulrich Beck's (2008) World Risk Society come to dominate the public sphere, the commonality of implications of this for daily lives across the world – in different cultures and communities – are revealed as the pandemic sweeps across the globe. This global crisis reveals the categories of human value priorities as the global discourse reverts to existential security and safety and one can see how relational and universal dimensions of human values have increasing salience. In short, the Covid-19 crisis may be interpreted as revealing that, at any time; all human value categories are active as individuals respond, individually or collectively, to complex issues.

As of now, it is too early to say what will be the next value priorities of the citizens of the world, but ongoing reflections by various actors highlight potential evolutions as to what will be the new popular words of tomorrow. For instance, a study conducted by Capgemini Invent highlights the following "*new words*" for tomorrow: Reset, Risks, Sobriety/Frugality, Labour, Trust, Digital Sovereignty, Re-inventing logistic, Synchronisation, Prevent (Grass, 2020). In this context, it will be relevant and interesting for ESA to reflect on how ESA can respond efficiently to the future priorities of the citizenry.

Conclusions and recommendations

There is overall clearly great potential for ESA when it comes to public value. As with most of the authors public value collaborations to date, the public value approach, asking new questions about outcomes and public contribution, reveals outcomes and benefits of value to the public, which the organisation delivers in the public sphere and which often go unrecorded and are frequently unappreciated. The public value profile work gives insights into the relationship between ESA's output and outcomes in the public sphere assessed by respondents against the universal set of human value categories.

Figure 9.16: From measuring to managing public value at ESA



The results and the methodology must be seen within these limits. In fact the APSU study marks the fit between the universal human values ‘set’ and the outputs of ESA as perceived by *informed* citizens in specific aerospace settings, and not a representative sample of the public. This study relies on a degree of awareness and understanding for respondents to make the connection between beliefs about the output of ESA and the value categories representing human needs and motivations.

From the evidence of internal interviews with staff, and from a review of the data in this report, the public value of the ‘Space for Earth’ programmes and wider activities of ESA may be neither appreciated nor effectively communicated.

The results of this study on ESA’s public value contribution to society can be interpreted in different ways. On one hand, one can say that an organisation such as ESA should have a positive performance with respect to citizens’ expectations in every single aspect of public value. On the other hand, it can also be claimed that a positive performance is required only in some of the Human Values, while others do not matter for an organisation such as ESA. For example, the under-performance of ESA in the value of ‘tradition’ could be compensated for by the fact that it is not the objective of ESA to carry on tradition, but rather to provide a clear break from the past through progress and innovation.

Moreover, there are two aspects of recommendations which can be formulated considering the conclusions drawn from our results. First, these conclusions could be interpreted as a need for an enhancement in communication and strategy to fill in the gaps identified.

In the context of space 4.0 and the new space economy generally, with its commercial and economic focus, there appears to be a clear and distinctive role for a public space agency with a democratic, civil mandate in society embedded in the public sphere. From the evidence examined, we suggest, within a wider strategic approach relating to the totality of ESA’s public value outcomes, that particular attention be paid to messaging within the three value categories associated with the category of ‘universalism’, (Schwartz et al 2012) and that these be given special emphasis in positioning ESA as a public value institution within the New Space Economy with its focus on economic benefits.

These value categories (after Schwartz et al 2012 page 669):

- ‘Concern’ relating to motivations associated with commitment to equality, justice, and protection for all people.
- ‘Nature’ focusing upon technologies and outcomes relating to the preservation of the natural environment.
- ‘Tolerance’ focusing upon its role in promulgating and facilitating acceptance and understanding of citizens and societies worldwide.

Given the democratic nature of ‘Space for Earth’ activities, and the importance of the public perception of ESA’s value among funders and stakeholders – especially the public – strategic activity to present and position ESA in these domains would facilitate a fuller appreciation of the value of ESA and space activities in the public sphere beyond the narrower setting of the new space economy.

10. Polycentric policy communities and the public value profile of the nuclear industry in west Cumbria

Rick Wylie with Michael Heaslip, John Fyfe, Willie Slavin, Stephen Haraldsen and Suzanne Wilson

Introduction

This chapter is about the influences upon perceived public value both internally to an action situation and within the wider context of the policy and cultural context within which that action situation exists. In it we provide insights into the issues surrounding the realisation and articulation of public value and its management by a major industry and how the socio-political context impacts upon the discourse surrounding the value of that industry. We also explore how individual 'street level bureaucrats' (Weatherley and Lipsky 1977) have a real bearing and impact on the generation of public value.

In previous chapters we have seen how complex a construct and concept public value is. Variously described as a paradigm (Stoker 2006, 2007) and 'the next big thing' in public administration (O'Flynn 2005, 2007), it essentially rests on the realisation of needs and motives expressed as human values, perceived by citizens as being relevant to them as they go about their daily lives. Today's complex policy environment may be characterised by multiple organisations collaborating in complex policy structures. It has been suggested that public value may be regarded as a 'narrative' for networked governance (Stoker 2006) and as a motivational dynamic which can connect diverse and disparate actors in this common 'narrative' towards the achievement of public value. Earlier, we suggested that issues may be managed at different scales and that various 'action situations' exist which can shape and bear upon decisions and interactions at various levels. We use Ostrom's IAD framework (2010) as a foundation upon which to locate the key elements of this incorporating the human and natural environments and the set of rules associated with the dynamics of the policy process within an 'action situation seen as comprising a nested set of relationships all bearing upon the ultimate public value outcomes and we appreciate the role of the individual policy entrepreneur in this polycentric process.

This case study of the nuclear industry in west Cumbria (chapter 10 looks at an industry which has become dominant socially, economically and politically in a peripheral community (Wynne et al 2007; Blowers 2012; Bickerstaff 2014). The dominance of the nuclear industry in west Cumbria makes it an interesting and especially relevant case study for studying the breadth and depth of public value and the scope and scale of a public value profile. The nuclear industry in west Cumbria is a composite of many organisations and initiatives. It was created over 70 years ago and has shaped and supported the society and communities of the area for almost three generations. If public value is about the public sphere and individuals' interactions within it then this case study should reveal a high level of perceived value impact across all value domains.

It is based upon input and insights from members of the nuclear industry and its supply chain and policy community, and who were surveyed in nuclear community settings. This primarily took the form of responses to a public value profile questionnaire among members of the nuclear industry and its supply chain in the specific setting of the west Cumbria area, which is dominated by the nuclear industry and the related agendas of stakeholders and operatives. Through these insights, with comment and input from professionals in social exclusion, education and community development, we focus upon the links between policy levels and the discourse in the industry about its value.

This chapter reveals the impact of the cultural, economic and stakeholder discourse upon the unit of analysis or the public sphere in this study – namely, the public value of the nuclear industry in west Cumbria. From this specific setting we speculate on how the agenda of an area and an associated discourse may influence the public value profile that is connected within a specific discursive setting – in this case, west Cumbria, where the Sellafield nuclear complex is culturally, economically and socially dominant. This chapter continues the assessment of the Ostromian action situation as a focal setting for interactions both internally and externally and which, we shall suggest, may be causing the industry (and its authorising environment) to fail to appreciate the full measure of its value contribution to the public sphere.

The nuclear industry in west Cumbria

West Cumbria is located in the north western corner of England. It comprises two local authority areas (Allerdale and Copeland Boroughs) and two parliamentary constituencies (Copeland and Workington). Since the late 1940's the area has been the home of the largest civil nuclear site in Europe which dominates the economy and community of west Cumbria.

The nuclear industry, especially the Sellafield site and its associated facilities, are embedded in west Cumbria. The Sellafield nuclear complex began to develop from the late 1940s, initially producing plutonium for the British atomic bomb tests in the 1950's. Later, the Calder Hall Magnox type power station opened in 1956. More recently, nuclear fuel reprocessing has been undertaken at the complex and the controversial THORP (Thermal Oxide Reprocessing Plant) reprocessing plant began reprocessing spent nuclear fuel in 1994 following a lengthy public inquiry. In the late 1990s and early 2000s manufacturing of mixed oxide fuels commenced, though this was mired in controversy due to falsified records and underperformance. In 2011, following the Fukushima accident in Japan, which had been the main customer for the MOX fuel, the facility was closed. Today, as reprocessing of fuels ends, the Sellafield and associated nuclear sites in west Cumbria are predominantly involved with decommissioning and waste storage.

From 2008 to 2013, west Cumbria was involved in a period of consultation as a potential site for consideration to house an underground nuclear waste facility as the Copeland Borough participated in the early stages of the UK Government's Managing Radioactive Waste Safely (MRWS) policy process for consideration as a potential site for an underground nuclear waste store. There continues to be some controversy over the disposal of radioactive waste in a permanent storage facility, though the site selection process is at a very early stage of a very long process.

From 2009 to 2019, a nuclear power developer, NuGen, was going to build a group of nuclear reactors for power generation adjacent to the Sellafield site. Following a UK-wide site selection process, land adjacent to the Sellafield nuclear facility was one of the nine UK sites to be approved for new reactors. Two other west Cumbrian sites were met with significant local opposition (Haraldsen et al 2011). The £15 billion development at Moorside Power Station, adjacent to the Sellafield site, centred around three Westinghouse 'AP1000' reactors with associated turbines, support buildings, a cooling system using water from the Irish Sea and upgraded power transmission lines to the national grid. This failed due to a lack of interest in private finance markets, though in 2020 the French reactor developer EDF has stated interest in building two of its EPR reactors on the site, as it is at Hinkley Point C in Somerset and is proposing for Sizewell C in Suffolk.

The prospect of several smaller, modular reactors has been proposed as a viable nuclear future for areas like west Cumbria and for former reactor sites in north Wales. These would not share the same massive capital cost burden and investor risk of those proposed for Moorside. For the community, the perceived benefit of these developments go beyond jobs and money, though these are certainly seen as important, with positive impacts on pride, aspirations and skills that can then generate further benefits (Haraldsen et al 2020). These developments, however, could see the greatest benefit go to the manufacturing facilities for the modules, with comparatively little benefit going to the host communities of the actual reactors.

Though the nuclear industry in west Cumbria was established in the late 1940s, it only became a dominant part of economic and social life from the 1980s. This was due to the decline of extractive and secondary industries (as was common in many peripheral communities in the UK at the time), which coincided with the expansion of the Sellafield site and trade union activity which led to significant wage increases at the start of the 1980s. The combination of those elements expanded the number of jobs and also ensured relatively high levels of remuneration, leading to west Cumbria being one of the most public sector dependent areas of the country (Oxford Economics 2017) with some of the highest median wages in the UK (Oxford Economics 2017). Sellafield Ltd currently employs 11,000 people, the majority in west Cumbria. Today, the Sellafield site itself covers six square kilometres and contributes £1.5 billion at its base in west Cumbria. Other large employers, such as the Nuclear Decommissioning Authority (NDA) who have a base in west Cumbria, also make a significant contribution to west Cumbria. The industry is diverse and is made up of a constellation of suppliers, many of whom are totally engaged in nuclear work and which may not be present in west Cumbria were it not for the Sellafield site. Consequently, it would not be an exaggeration to say that west Cumbria, its economy and its community would be a very different place were it not for the nuclear industry. The industry spend supports retail and the property markets and its existence has created an economic certainty in the area which has lasted for over two generations. There are few families in west Cumbria who are not touched economically or socially by the industry in some way. The depth of the economic impact is also demonstrated by most local companies being members of the Britain's Energy Coast Business Cluster (BECBC) and in some way being a part of the nuclear supply chain.

The statistics of the economic activity of the Sellafield site and its economic and financial dominance of the area are impressive. A study by Oxford Economics in June 2017 noted…

> *"Sellafield Ltd plays a considerable role in… Cumbria. It directly employs more than 11,000 people of which more than 86 percent are based in Seascale in Copeland.*
>
> *From an employment perspective, it sustains 43,800 FTE2 jobs, of which 27,950 jobs (63.8 percent) are in Cumbria and Warrington. As with GVA, Sellafield Ltd is extremely important to employment in Copeland sustaining an estimated 58.7 percent of local jobs. It also offers well paid employment. The average salary in Sellafield Ltd was over £43,000 in 2016/17 (compared to the mean annual pay for all full-time employee jobs in the UK at £34,451)." (Oxford Economics 2017).*

In the locality of Sellafield, the discourse about the nuclear industry focuses very much on the economy and this is indeed a dominant belief about the industry among local residents.

It has been argued elsewhere that the way of life in west Cumbria is a dominant and locally prized element of the west Cumbrian sense of place (Wylie and Hague 1996a). The nuclear industry at Sellafield is perceived by local inhabitants to underpin this way of life, and the effect of this perception may be seen in the unique level of support for the nuclear industry in west Cumbria. This level of support suggests significant public value associated with the industry for extrinsic reasons. The nuclear industry was perceived to be the dominant industry in west Cumbria by 85 per cent of respondents, with 76 per cent believing that it will continue to employ people for many years; while 88 per cent agreed that the economy of the area is dependent upon it (GECU local opinion survey, by CN Research, December 1995). These findings reflect the perceived role Sellafield plays in economically underpinning the west Cumbrian community. It is important that consideration be given to the motives for this difference between local and national attitudes to the nuclear industry.

At the time of this research, the industry was, however, in a period of decline, with fuel reprocessing in the process of coming to an end, with a major power generation investment having been cancelled and remaining in a state of flux, and a radioactive waste geological disposal facility being enmired in a lengthy politicised policy process. In the community, however, it may be that the impact of these factors have not altered perceptions of the industry's value at the time of this survey. Moreover, the industry's future is talked up constantly with 'booster' phrases associated with its development made by politicians and the industry itself.

In addition to job creation and the running of the direct business of a nuclear site and nuclear companies, within the Energy Act of 2004 supplemental duties were given to the NDA. These are to consider the socio-economic impact of our activities, and to ensure appropriate skills, RandD and supply chain development. From a public value standpoint, the industry is involved with the social and public sector through its socioeconomic plan and social investment programme. Sellafield Ltd, the NDA and the nuclear supply chain all have social impact teams who deliver social impact in west Cumbria in alignment with Sellafield Limited's Social Impact Strategy. These social impact teams work as part of a collaborative network of local initiatives aimed at sustainable long-term impact. The four main themes of the nuclear social impact strategy that attempt to tackle issues of social inclusion are:

1. Engagement with schools, by organising class activities, placements, and other programmes aimed at primary and secondary school and pupils.
2. The provision of apprenticeships and training opportunities in the nuclear sector, working closely with local further education providers and *All Together Cumbria*, a social enterprise and recruitment brokerage that supports businesses in Cumbria to connect with local skills.
3. Measurement and evaluation programmes through the Social Value Portal, an online tool for measuring, managing and reporting social value in the form of 35 TOMS (Themes, Outcome, Measurements), to calculate the Social Value Added (SVA) in the local area.
4. Offering staff time, services and resources to local community organisations, including *Cumbria Exchange*, an online portal, to promote skills and corporate volunteering and sitting on committees of local grant-making bodies such as the *Cumbria Community Foundation* and *Copeland Community Fund.*
5. Direct cash donations, such as in February 2020 when it was announced that Sellafield Ltd would provide £30,000 to a project to replace services that stopped being available when *Mind* closed in west Cumbria, with the funding distributed via the Cumbria Community Foundation (UK Government 2020).

Thinking about the contribution of the nuclear industry to the social exclusion agenda, Willie Slavin, former Chair at the Howgill Family Centre and Chair of the West Cumbria Child Poverty Forum said:

"I would evidence the industry's investment of capital at a critical stage of the development of the Whitehaven Foyer Project, now flourishing as a result of that very substantial intervention. The Phoenix Youth Club in Cleator Moor recognised for its valuable work with disadvantaged young people is assured of on-going support financially and in immeasurably valuable in-kind support in its governance. Howgill Family Centre, with a forty-year track record of commitment to children and families in need, has benefited from underpinning investment at a number of critical stages of its service to the community".

Overall its 'socioeconomic' spend totals in excess of £10 million per annum and many companies and charities in west Cumbria are indirectly supported by the civil nuclear industry. Since the onset of the Covid-19 pandemic this response has had to adapt. During this crisis, workers within the nuclear industry have been redeployed to support the Covid-19 response, funding has been given for the immediate community response, focused on supporting communities facing hardship, third sector organisations delivering vital elements of the crisis response have received equipment and donations, and the work experience programme has moved online.

The relationship between the nuclear industry and education is wider than work experience and deeper in some cases than individual programmes working across many schools. For example, the industry supports governors in many, if not most, local schools and the local college and the University Technical College, and sponsors two local academy schools. Jonathan Johnson, the Chief Executive of the West Lakes Multi-Academy trust, and previously the Principal of West Lakes Academy, a school co-sponsored and endowed by the nuclear industry, said:

"Sellafield Limited has cultivated, directed and mentored talent to provide west Cumbria with a richness of social capital because the educational outcomes of those young people have given them opportunities of further education, training and employment. It has then provided the net to catch all that potential and channel it into useful occupations which have in turn enabled the regeneration of our communities.

"Since 2008, when Sellafield began its sponsorship of West Lakes Academy (along with the University of Central Lancashire and the Nuclear Decommissioning Authority), the values, education and skills nurtured in all the young people who've been through the academy have created closer-knit communities. Those communities have better self-regulating behaviour, better attitudes towards the vulnerable and stronger resilience through raising the next generation to guard against the loss of their social capital". (Johnson 2020.)

If we compare the west Cumbrian and national attitudes towards the nuclear industry, the differences are striking. Sixty percent of the public in the Copeland Borough were either 'mainly favourable' or 'very favourable' towards the nuclear industry. This local support for the nuclear industry holds true even for the vexed issue of radioactive waste storage and disposal (at least over the period of the survey). In the local survey, respondents of Copeland Borough were asked whether they supported or opposed the construction of a nuclear waste repository in their area. This poll found that, in the Copeland Borough area, only 23 per cent of the population completely opposed the construction of a nuclear waste depository in west Cumbria, adjacent to the Sellafield nuclear complex.

Copeland may be an exceptional area, one in which there is a high degree of cognitive and wider cultural engagement with the nuclear power and reprocessing industries. In the Sellafield Travel to Work Area (TTWA) which largely approximates to the Copeland Borough area, there is a high level of public support for the nuclear industry. Moreover, the motive for that support appears to be related to individual interests, in that individuals value the community life of the west Cumbria area and believe that, through its economic activity, Sellafield underpins the local community.

Attitudes of local residents to a nuclear power station compared with non-local respondents and noting '...research on local attitudes does not support the notion that familiarity leads to more favourable attitudes.'. By contrast, in the Sellafield TTWA we found a distinctive attitude profile among local residents who were not employed directly in the nuclear industry. Indeed, rather than denying the risks associated with the nuclear industry, and its environmental consequences, individuals in the vicinity of the plant actually valued it because they believe it underpins the locally prized communities and ways of life in the area.

In summary, public value is, by our approach measured in situ, in places which form the settings for individuals' lives and, though this is far from the boardrooms of international investors and the centres of UK Government policy making, decisions and policies and priorities made at different levels may influence beliefs about the agenda and achievements associated with a referent. Essentially, organisations produce value in the public sphere and, from this, enjoy legitimacy which is especially important for publicly funded organisations in their authorising environment. Private sector organisations produce public value too and as we shall see, this can bear positively upon their operations, especially in winning contracts from government or as suppliers in the supply chain of the Sellafield facility around which the nuclear industry in west Cumbria is clustered.

In the rest of this chapter we will examine how this industry is perceived to provide value to citizens in its local community, one which is economically dependent upon it and which has, to a large extent, built up around it. Public value gives a wider view of the impact of this industry upon the public in west Cumbria, among citizens who don't necessarily work for it, and who don't have a direct economic relationship with it. Public value gives us a view of the outcomes of the activity of this industry, and of its presence and its impact among those who, by proximity and geography, connect with the industry by encountering outcomes in the public sphere. Public value is a reasonable expectation of publicly owned industry but ()

it is also produced by private sector organisations – and social sector organisations too. In fact, all organisations can produce public value to a greater or lesser degree (Meynhardt 2012; Meynhardt et al 2017) and a public value approach focuses upon its perceived contribution to society and how it can optimise its contribution and communications with the public at large beyond commercial or trading relationships. In an area like west Cumbria, which is peripheral and remote, the benefits associated with the outcomes of the activities of the nuclear industry extend across most policy areas and, as we shall see, most value areas.

The public value profile of the nuclear industry in west Cumbria

To recap on the methodology we use, this exercise in public value profiling draws upon the psychological approach to public value proposed by Timo Meynhardt (2017) which is essentially "Public value reflects basic needs, and basic needs form the fundament for public value…" (page 140) which we have expanded by using two of the leading theories of human values); that of Shalom Schwartz with its focus on motivational goals (2012), and Ronald Inglehart with its focus on the direction of travel in achievement of life goals (1990). This approach identifies the outcomes of its activities, the perceived contribution to the public sphere made by a referent to the public – in this case, the nuclear industry in west Cumbria – from evaluations made by reasonable, informed citizens embedded in the community and with an understanding of the outputs and an appreciation of its outcomes.
For the research in this project we collaborated with organisations that are embedded in the west Cumbria area in the nuclear policy and commercial community. Firstly, the West Cumbria Sites Stakeholder group (WCSSG) which is an independent body whose role is to provide public scrutiny of the nuclear industry in west Cumbria. The WCSSG comprises representatives from local government, regulators, unions and community groups. Its role is to scrutinise aspects of the Sellafield site and the Low Level (nuclear) Waste Repository, especially regarding operational issues, environment health, emergency planning and the site's socio-economic impacts. Secondly, we also collaborated with Britain's Energy Coast Business Cluster (BECBC). This is a commercial membership organisation which aims to represent the collective voice and aims of the supply chain within Cumbria and the surrounding area, with a specific focus on the energy sector. The organisation and structure of the group provides an environment in which BECBC members can grow and enhance their businesses through networking, collaboration and partnership in order to access opportunities and effectively deliver customer requirements within the region and other relevant areas across the UK.

At both groups the same questionnaire was used which tapped beliefs about the value contribution made by the nuclear industry in west Cumbria. The questionnaire was based on the Schwartz value circle of ten universal value categories (Schwartz 2012). This survey probed beliefs about the value outcomes generated by the industry. We did not probe the opinion of the nuclear industry in west Cumbria and neither did we ask respondents to rate or rank individual values. A key point in public value research is that these values are universally recognised, though a universal set will be prioritised differently by individuals, and they are in effect 'public' values. Each of these values is based upon an underlying series of goals that motivate action which underpin them.

The respondents could answer strongly agree, agree, neither, disagree and strongly disagree to the following question and ten value statements:

"The nuclear industry in west Cumbria makes a valuable contribution to citizens and society as it:

- Gives citizens opportunities to develop their abilities and realise their ambitions (ACHIEVEMENT);
- Creates challenge and change stimulating interest in science, technology, business and engineering (STIMULATION);
- Contributes to making west Cumbria an enjoyable and exciting place in which to live and work (HEDONISM);
- Creates pathways to personal success for local citizens (SELF-DIRECTION);
- Provides social status and wealth to its workforce, and citizens in the local community (POWER);
- Creates security and stability in the local community (SECURITY);
- Promotes a culture of respect and conforms with community expectations (CONFORMITY);
- Is part of the heritage of the area and respects and contributes to its customs (TRADITION);
- Is dependable and trustworthy acting in the interests of the citizens and community of west Cumbria (BENEVOLENCE);
- Creates benefits for all members of the community and the environment (UNIVERSALISM).

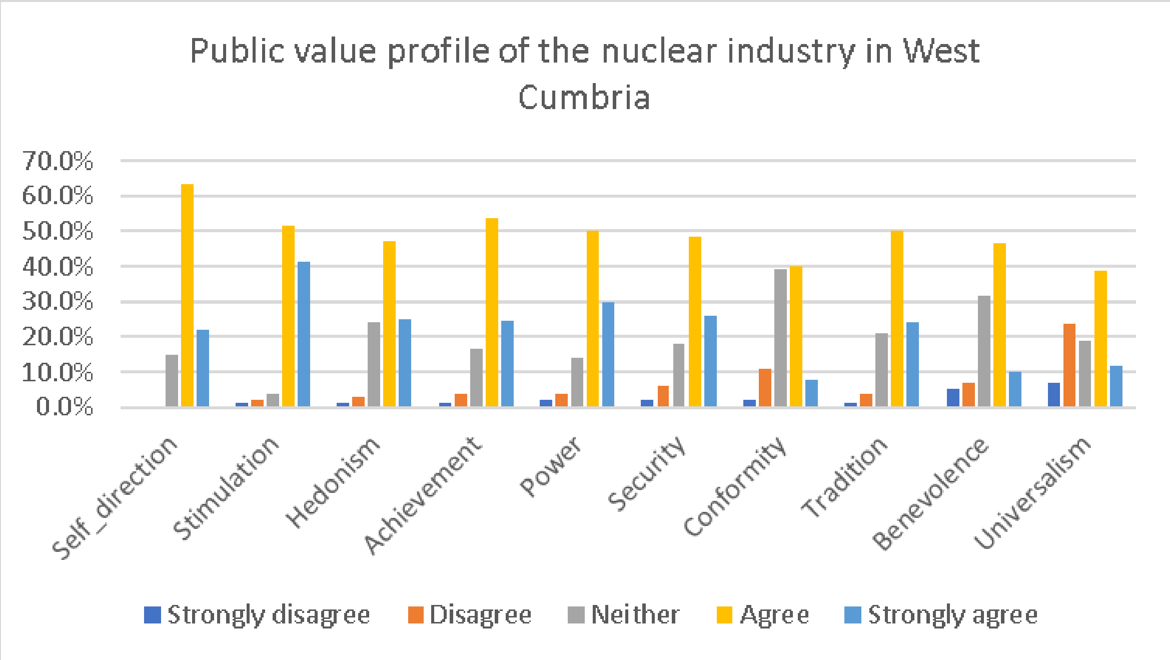
These questions tap beliefs about respondents' perceptions of the ten value categories posited by Schwartz (2012). The summary underlying human motivations for each of these values is as follows:

- SELF-DIRECTION – independent thought and action;
- STIMULATION – excitement and novelty;
- HEDONISM – self-gratification;
- ACHIEVEMENT – demonstrating competence;
- POWER – status and prestige;
- SECURITY – safety and low risk;
- CONFORMITY – group norms;
- TRADITION – customs and heritage;
- BENEVOLENCE – devotion to own 'in group';
- UNIVERSALISM – welfare of all people.

The surveys were undertaken using questionnaires administered in person by UCLan researchers in regular meetings of firstly, members of the West Cumbria Sites Stakeholder Group and secondly, to members of BECBC at a regular members' meeting. We stress that this was deliberately not a representative sample of the local public. These were an elite group of nuclear industry professionals and policymakers involved in stakeholder and commercial relations. Together, these results give an appreciation of perceptions of the nuclear industry about its wider value and an insight into the discourse of the nuclear community itself.

The survey findings revealed a positive public value profile for the nuclear industry in west Cumbria. Given the favourable public opinion, and the consistency of beliefs about the industry and the agenda of the area this is not surprising. However, the values approach goes further into the wider relationship between the industry and the public sphere.

Figure 10.1: Public value profile of the nuclear industry in west Cumbria based upon Schwartz's 10 value categories.



The table above shows all responses across the ten value categories. In all categories, the modal majority response was 'agree' with 'strongly agree' being the second highest response in all but two categories. In summary…

The highest scores were in the following categories associated with the self:

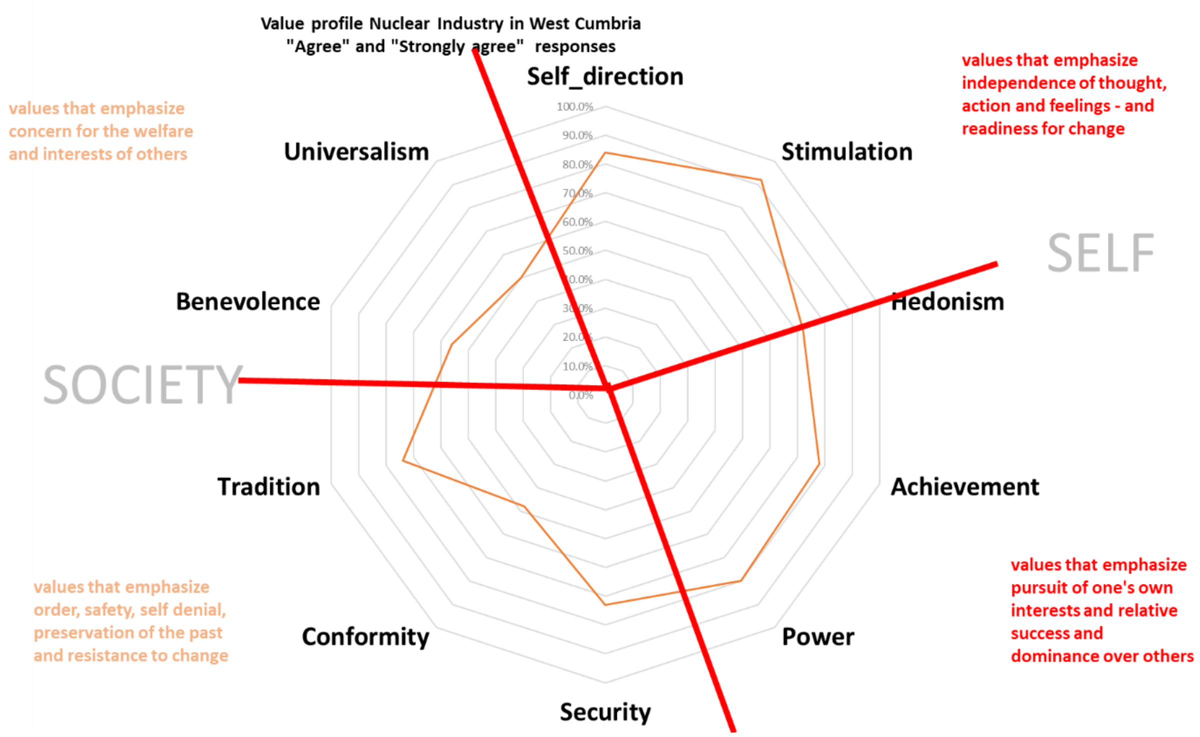
- **Self-direction –** independent thought and action-choosing, creating, exploring;
- **Stimulation** – excitement, novelty, and challenge;
- **Achievement** – personal success;
- **Power** – social status and prestige, control or dominance over people and resources.

The lowest scores were in the following categories associated with society:

- **Universalism** – understanding, appreciation, tolerance, and protection for the welfare of all people and for nature;

- **Benevolence** – preservation and enhancement of the welfare of people with whom one is in frequent personal contact;
- **Conformity** – restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.

Figure 10.2: Radar diagram representation of agree and strongly agree responses from above value profile of the nuclear industry in west Cumbria based upon Schwartz's 10 value categories showing four second order summary categories and value categories associated with the self and society



The diagram above maps summarised 'Agree' and 'Strongly agree' responses of the ten propositions, against the second and third order value categories within which the ten value categories may be summarised. This reveals the perceived contribution of the nuclear industry to west Cumbria. The results suggest a very significant, positive value profile as recorded using our value-based methodology. However, the results reveal some variation in responses between two of the 'second order' value categories, with those associated with 'independence of thought, action and feelings' and 'readiness for change' receiving a much higher score overall than those emphasising 'concern for the welfare and interests of others. Overall, however, while responses are positive, there is some clear variation.

Policy levels and discourse

Earlier, in chapter three, we introduced the IAD framework as an organising structure in which to locate public value and associated elements into a multiple-level framework for public value management. This focuses on co-production and networked forms of governance involving complex networks of organisations working across sectors and scales that collaborate in sometimes large networks at several institutional levels. Here we follow Aligica,and Tarko,(2012)who provide the conceptual link between public value in a polycentric environment and public value and its pursuit in shaping outcomes and policy and which we have used in a framework approach to public value management. A public value approach gives a wider appreciation of the multi-level nature of public policy, by locating a local 'action situation' of interactions between actors in wider policy, administrative and biophysical settings, and by highlighting the range of influences that there are on the creation and realisation of public value.

This case study of the nuclear industry in west Cumbria gives an insight into appreciating the importance of two factors that are exogenous to the Ostromian Action Situation, namely: the forum in which individuals interact and the ways that local level action situations are influenced by wider policy and constitutional levels which bear upon and shape their interactions. This case suggests that it may be the discourse created by individual participants rather than a statutory policy position or document or formal rule structures evidenced from a strict Ostromian reading of the IAD framework (Clement et al 2009). These observations are consistent with the suggestions of Amezaga and Clement a (2009) that two other exogenous variables may be very influential across and within IAD levels and should be incorporated into a re-envisaged action situation. These are firstly, the socio-political context and the importance of an understanding of how power is distributed and how political and economic interests drive actors' decisions within a particular set of rules. Secondly, and perhaps directly related to this point, is how those interests may come to shape values, norms and preferences, and position actors, in short how they come to create a discourse around the subject. Following Hajer (1995) this refers to an …ensemble of ideas, concepts, and categorisations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities".

The nuclear industry policy framework is polycentric, complex and multisectoral. It is a hybrid mix of commercial, scientific and commercial interests on which, in areas like west Cumbria, many localities pin their hopes for a secure economic future. To appreciate some of the dynamics here, and for the purposes of this chapter, we have simplified the nuclear industry policy network at three levels associated with public value.

At the first level, the national policy context perhaps best exemplified by the UK Treasury's Public Value framework, defines public value as:

> *"The value created when public money is translated into outputs/outcomes which improve people's lives and economic wellbeing"* … and … *"The intended impact of spending public money, i.e. the objectives sought by government. They can be either direct (usually measurable and timely) or indirect (causality usually difficult to determine and may have a time lag)"* (UK Treasury Public Value Framework, March 2019).

Earlier (Chapter 2) we cited Elizabeth Truss MP, Chief Secretary to the Treasury, who wrote in the Foreword of the above Treasury framework that:

> *"The publication of Sir Michael Barber's report 'Delivering better outcomes for citizens: practical steps for unlocking public value' in November 2017 sent a clear signal on the importance of public value and of government having a greater focus on outcomes delivered for taxpayers' money. The report recommended trialling the internationally pioneering Public Value Framework as a tool for maximising the value delivered from funding. The report's wider recommendations also included practical steps to improve performance in two key areas: the availability and use of performance data and the prevalence of continuous and disruptive innovation."* (March 2019)

Wheatly of the Institute for Government (IfG) noted the importance of this Framework saying that:

> "The Treasury has been presenting the PVF as a central element in its approach to planning spending and performance, notably in evidence to the Public Accounts Committee (PAC) and in response to the National Audit Office's (NAO) critical findings about the effectiveness of government planning…" (2019 page 38).

The IfG went on to note that *"(the)… 2019 spring statement added that the spending review "will focus on public value outcomes."* (page 38). Clearly, public value is front and centre in central government thinking. The UK House of Commons Public Accounts Committee in its review of the Sellafield facility in Cumbria, reporting in 2018, pursued the issue of value from government spending specifically associated with the nuclear industry in west Cumbria, concluding that:

> *"The Energy Act 2004 requires the NDA to promote socioeconomic development and to work with local communities. We examined the NDA's progress in 2013 and found that it was not clear what wider economic benefits had been achieved from the enormous quantity of public money that has been spent at Sellafield.*
>
> *The NDA and Sellafield Limited have an opportunity to lead and accelerate the development of the UK's nuclear sector, creating skills, jobs and economic growth,*

> *especially related to the nascent new nuclear programme. The NDA accepted that does not yet do enough to maximise the potential socio-economic benefits of its expenditure on nuclear decommissioning".* (House of Commons Committee of Public Accounts. Nuclear Decommissioning Authority: risk reduction at Sellafield Sixty-Fifth Report of Session 2017–19 Report, together with formal minutes relating to the report Ordered by the House of Commons to be printed 24 October 2018)

At, nominally, the second level of an IAD framework representation of the nuclear policy network for west Cumbria, there exists a complex web of relationships between actors representing the community – i.e. the public. Perhaps the most telling is the Sellafield social impact strategy which:

> "*… seeks to create shared value. This means securing a positive return to all stakeholders throughout the Sellafield system. This ranges from the UK taxpayer, HM government, the Nuclear Decommissioning Authority (NDA), local authorities, our supply chain and the communities in closest proximity to our sites. It is not an add on, it is an expectation.*
>
> *Unleashing and securing the significant potential for shared value from the investment in Sellafield Ltd requires new, longer term and stronger relationships with our stakeholders, supply chain partners and communities. Embracing new collaborations, partnerships and relationships will be fundamental to the collective success of west Cumbria and Warrington both economically and socially"* (Sellafield Limited, 2018 page 4).

Clearly, the Sellafield organisation responds to the wider supply chain and socio-political environment and context within which the site and its supply chain are located. Under the heading *'Thriving Communities',* they defined its social impact outcome objective *as "Social impact activities as sustain and enhancing community assets and address community needs".* Subsequently, the heading *'What does success look like?'* reveals a return to the taxpayer and critical social issues that does engage stakeholders into the decision-making process:

> *"Resources, investment programmes and interventions are targeted to activities that provide the largest social impact and improve the financial sustainability of community organisations. Investment is prioritised to enhance the social and economic return to the taxpayer, Sellafield Ltd and local communities. Local community groups and organisations have clarity on the Sellafield Ltd and supply chain resources and opportunities available to them, access is optimised, transparent and coordinated for maximum impact. Local stakeholders are involved in investment prioritisation and decision making. Resources and interventions are targeted to activities that address critical social issues, including health and wellbeing".*

This short passage, which reflects the nuclear industry discourse, illustrates a wider issue with public value realisation. The results of our survey picked up and reflected the key points in the above *'narrative of success'* as achievement, opportunity and relationships. However, the document does not consider the wider impact on individuals, which, as we have reported earlier, is undoubtedly a consequence of the activities of the nuclear industry in west Cumbria.

At the third and final level – the level of government-, there is a clear sense of the importance of public value and its pursuit in policy. However, though the policy is in place it may be that the discourse within the socio-political context fails to coincide with the policy intention. Professor John Fyfe, an advisor to government on regional nuclear issues said:

> *"The Treasury's policy may say all the right things in words but does not reflect Treasury or government policies in practice. There is a divergence between the public value framework on the one hand and In which locally dominant economic discourses prevail backed by asymmetric relations in what might be termed action situations between levels". (Fyfe 2020)*

At the regional level, and specifically on the point of public value and discourse, Michael Heaslip (Borough Councillor and former Secretary to the West Cumbria Partnership) said on the topic of the failure to implement inclusive community development plans for west Cumbria over some decades:

> *"…one could say exactly the same about the 'Economic Blueprint'. It was presented as an update of the 'Masterplan' but really wasn't all: it was a re-working of the "Advantage through Knowledge" them from 'New Vision' and from 'Future Generation' but you weren't allowed to say that. Another holistic document coming from a wellbeing and public value perspective which the politico-economic discourse in west Cumbria could not accommodate". (Heaslip 2020)*

As we have seen, however, there is a very significant amount of activity undertaken by the nuclear industry, especially Sellafield and the NDA, in respect of delivering public value. Perhaps though it is in the domain of the 'Street level Bureaucrat' (Weatherley and Lipsky 1977) where public value is most created. Operating in direct contact with the public sphere and with significant discretion in how these individuals conduct their work, these professionals may be the real policymakers in local contexts. As Willie Slavin notes regarding the social exclusion sector:

> *"In the twenty years of my involvement in the charitable sector of the west Cumbrian community, I have had good reason to take an acute interest in the nuclear industry's investment in this often-undervalued sector of the community. The principal message that I would draw is that the investment has had its most telling effect when experienced, locally based staff with a developed understanding of the community's*

> *needs have been able to make critical interventions to invest in charities with a long term, or assured, track record". (Slavin 2020)*

Thinking about the development of secondary education in west Cumbria, Adrian Thompson, Chair of Governors of West Lakes Academy for over a decade, a school that the nuclear industry (NDA and Sellafield Limited) sponsors, said, referring to the development of an academy school:

> *"…so much of the ultimate value of these interactions comes down to the work of individuals…".*

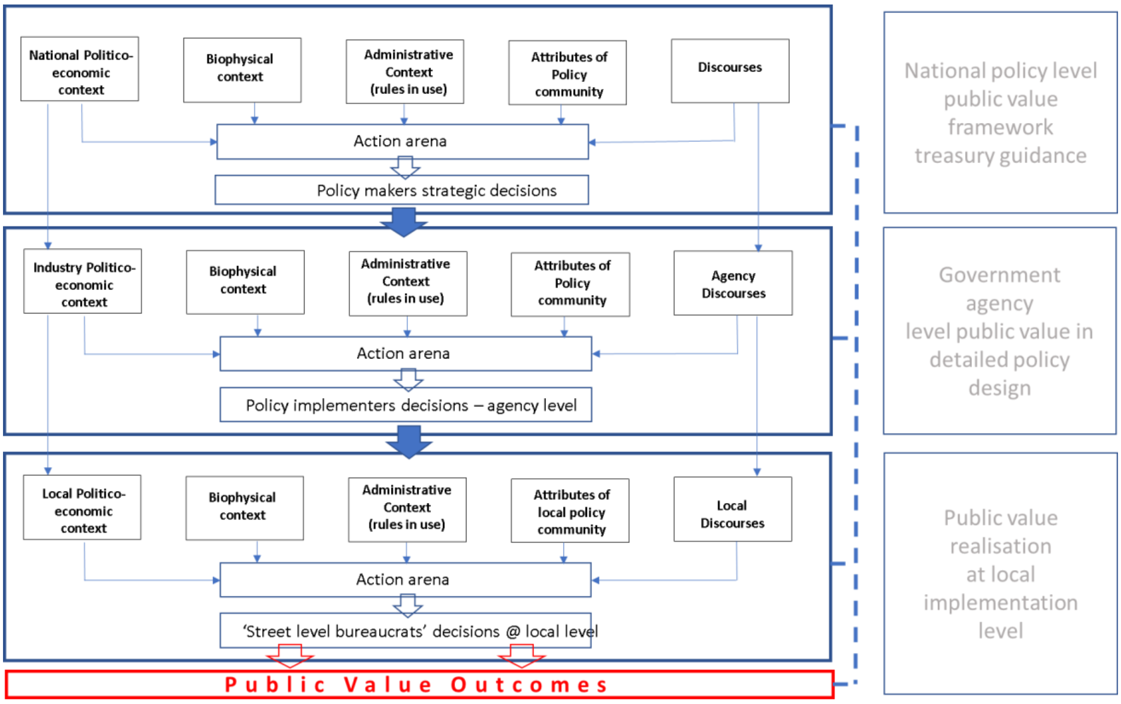
Professor John Fyfe, an advisor to government and the NDA on nuclear policy in regional settings, is perhaps uniquely qualified to comment on this. Thinking about the regional development issues associated with the nuclear sector, and drawing on experience in the UK and overseas, he makes a crucial comment about the relationship between levels, with local level actors engaging with other levels in a polycentric, multi-level policy environment:

> *"in terms of outputs. It is an identity of the 'right' people who can make all the difference by their influence AND awareness of what constitutes public value and an ability to collectively secure resources and existing institutional machinery to move in the same direction often with support from outside of a spatially defined local community". (Fyfe 2020)*

From a public value management standpoint, the west Cumbria nuclear industry may be envisaged using the IAD framework to illustrate an institutional structure at three levels.

The following diagram gives a summary representation of the IAD framework at multiple, nested levels (after Ostrom 2010) showing the elements of public value analysis with the street level bureaucrats at the lower level of the framework working within the overarching context of national policy and government agencies and achieving public value outcomes at the local level influenced by local politico-economic settings and discourses.

Figure 10.3: Multiple levels of action situation showing the position of the street level bureaucrats operating at a local level within local discourse environment and local politico-economic settings



(After Clement and Mazanega (2009) and Ostrom (1999))

As a management framework approach for the realisation of public value, the IAD framework provides a useful structure which we discussed in chapter three. Redrawn for this west Cumbrian context, we can include the politico-economic context at each level and the category of discourses at all levels. The multi-level IAD framework rendering above also reveals the importance of wider level perspectives to appreciate the range of influences upon the realisation of public value management processes. However, in redrawing the IAD framework, it may also be that the rules shaped by each level, in respect of the membership and boundaries of the action situation, should, to follow Stoker (2006, 2007), be based more upon values with, at the local level, shared value emerging from dialogue and engagement and the relational qualities of local policy communities with public value being a motivational and unifying dynamic as the local consequences of complex, polycentric systems and complex issues, including regional development being played out to achieve valued states of affairs.

Conclusion

This case study has drawn on the results of a survey of nuclear professionals and insiders about the perceived value contribution made by the nuclear industry in west Cumbria. The results of that survey of this elite group revealed an emphasis on private values associated with the self rather than social values associated with wider, societal values. We suggest that this is revealing of the prevailing discourse at the local level which is heavily influenced by commercial and economic concerns and individual achievement in that theatre. And yet, we have found, from conversations and interviews with policy insiders associated with west Cumbria at local and national levels, that the industry does produce significant public value in the wider universalism and benevolence areas. This project has revealed the importance of discourse and communication at the local level. Developing the IAD framework somewhat, we suggest that the idea of the action situation being largely driven by rules in use set at superordinate and adjacent action situations may be incomplete. At the local level, human values and a wider appreciation of public value may actually drive outcomes in policy settings, typically driven by policy entrepreneurs or street level bureaucrats. The power of the locality in shaping policy and the role of street level bureaucrats working for the industry and associated with developments and delivery at the local level may be significant and largely unappreciated. Often unannounced and little understood or acknowledged, this work at the local level is at the frontline of public value delivery.

This reveals the importance of public value to organisations especially those involved with public funding and oversight. Many of these organisations, like the nuclear sector, are involved in quasi-markets and performance measures associated with the new public management paradigm of public administration in which commercial and economic performance measures are more associated with ‘doing things right’ than they are with ‘doing the right things’. Performance in a public value paradigm requires one to ask a different set of questions associated with perceptions of public value and of the perceived relevance of an industry to the daily lives of ordinary citizens. This is a different set of questions to those associated with financial performance and economic efficiency.
This study of the dominant nuclear industry in west Cumbria has revealed the complex, poly-centric nature of policymaking and delivery, with energy policy actors making significant contributions to the social exclusion and community agendas, contributions which were less recognised among nuclear professionals. Crucially the public value associated with the facility extends well beyond the private and associated value deriving from spending and salaries (which are, of course, vitally important) by extending into the very fabric of society and the daily lives of individual citizens.

11. The public value of tourism, Covid-19, co-creation and the experience economy

Rick Wylie and Benjamin Carey with Katie Reed

In this chapter we consider the role a public value approach has in framing a future policy agenda for a key industry in a time of crisis. We focus upon the relationship between new institutional forms and public value in the context of complex issues and wicked problems like climate change and reflect upon the importance of relations and exchanges in local settings embedded in wider governance architectures. Our discussion is informed by experiences in tourism destinations, including Copeland Borough in west Cumbria, and other international locations.

A theme running through the previous case studies is the emergence of network governance and the existence of polycentric, hybrid networks of organisations working across sectors and scales in which citizens are seen as important actors in policy space. Perhaps a defining feature of policy today is the dominance of networks and the imperative for actors to engage across sectors and spaces to achieve things in a world in which actors with limited competences and capabilities confront large issues, like poverty, racism and climate change – and indeed, Covid-19. One of the key elements of a public value approach is its focus on human values and the engagement of the public into policy and organisational practice. In an era of the emergence of networked governance (Stoker 2006) in which people are motivated by relational values and in a world characterised by a wider range of legitimate actors in decision-making in settings of increasing complexity, uncertainty and connectivity, public value can provide a framework and a lexicon to recognise and respond to the need to act in the public interest.

For Bryson et al, as a paradigm for governance, public value management, based upon the recognition of public value, represents a new role for government and highlights *"an emphasis on public value and public values; recognition that government has a special role as a guarantor of public values; a belief in the importance of public management broadly conceived, and of service to and for the public; and a heightened emphasis on citizenship and democratic and collaborative governance"* (2014, page 445).

As we shall see in this chapter, focusing upon the tourism sector in rural areas in the UK and overseas, it appears that though the policy instruments are in place at the local, national and international levels, they remain disengaged in respect of any overarching institutional structure. Thinking about this at the time of Covid-19, a discussion of tourism and the visitor economy reveals the importance of the locality in the policy implementation process and the importance of engaging from the 'bottom-up' with host communities in the visitor economy in which difficulties in the relationship between host and visitor has implications for the future of the tourism industry in certain localities.

The public vale of tourism is being highlighted by the Covid-19 pandemic of 2020, in respect of the loss of access to travel and alienation from relational, hedonistic and wider values through the tourist experience. The public value of tourism (and in some areas, its disvalue) may be even more evident in the subsequent recovery as lockdowns ease and as citizens are able to travel and appreciate leisure opportunities in rural areas. What this discussion reveals are a wide gamut of values associated with tourism among visitor and host communities and the difference between the values of visitors in respect of their travel motivation, and residents in destination regions.

We comment upon the wider value of tourism in the context of the experience economy and consider a multi-level policy architecture embracing the UN Sustainable Development Goals (SDGs) and the UK Treasury public value framework, and suggest that the elements are in place for a reset of the tourism economy in light of Covid-19 and the issues it raises for social, environmental and economic reasons – and that localities may be the most appropriate level for the genesis of this policy imperative. A useful starting point for considering the public value of tourism is by reflecting on an earlier health emergency that had a profound effect on the way that governments and economic agencies in the UK have thought about tourism.

A key lesson of Britain's outbreak of foot-and-mouth disease (FMD) in 2001 was the importance of tourism to the rural economy. Contrary to the view that agriculture was the most valuable rural sector, research showed that tourism in the south of Scotland was worth more than farming and forestry combined; similar findings were made in the north of England. The closure of the countryside led to a significant number of business failures in the visitor economy, illustrating how many rural communities were dependent on the visitor economy for jobs and revenue. The experience showed that tourism was generating the largest proportion of new jobs, especially for young people, making the sector a key driver of economic development in rural areas at a time when urban migration and youth unemployment were major global trends. There had also been an assumption that nature-based tourism was proportionately more important to areas such as the Scottish Highlands with some of the largest mountains and iconic species in the country, such as the golden eagle and capercaillie, red deer and red squirrel amongst the ancient Scots pine, but further research showed that (for the vast majority of visitors) the draw of the countryside had little to do with an interest in natural history but was more about getting 'out of the city' or 'away from the office'. Thus, the marketing opportunity for the Lowlands of the south of Scotland was not to position itself as a sanctuary of rare natural heritage, even though in fact its rare peatlands, wildlife reserves and countless SSSIs (sites of special scientific interest) are a haven for dedicated naturalists, but to be *different*, albeit with access to all the necessary services that a visitor requires: somewhere to eat, sleep and 'go'. The result was that governments and economic agencies started to invest in rural nature-based tourism, because it had economic and social value for those living in rural communities and also delivered positive experiences and demonstrable health and wellbeing benefits for visitors from urban places. Thus, the public value of tourism was recognised as being more than economic.

Earlier in this book we proposed a framework for public value governance (Stoker 2006) based upon a levels of analysis approach to public value management. In this, drawing upon Ostrom (2012) and McGinnis 2011b) we suggested that public value may be seen as a driver of new institutional structures in more inclusive policy and governance structures in which human values underpin new relationships and governance architectures to optimise the value to citizens of the visitor economy both in respect of host and visitor communities and the wider environment.

Public value is, we have argued, on often a misleading term. Public value is not limited to public goods (Alford 2008) and it encompasses a wider range of things than public goods. Public goods, like services and facilities are essentially outputs – bridges, roads, infrastructure, and, in tourism, things like marketing campaigns. In the commercial market sector, many outputs also produce public value outcomes; that is to say they provide outcomes consistent with human values within the public sphere.

Our approach to public value management is grounded in human values and is realised in policy and practice through new institutional structures that engage in the public interests and in the pursuit of the common good in collaborative, interactive structures. In this chapter we focus upon the tourism sector and how, as part of the experience economy (Pine 2001, Pine and Gilmore 1999) we see the potential of the sector to reinvent its policy and decision-making process to create public value both in generation and destination areas and how these dynamics influence the tourism sector upon which so many lives and livelihoods depend.

The Covid-19 pandemic has thrown tourism into sharp relief. It has demonstrated the dependence, demand, and fragility of tourism. For the tourism industry, Covid-19 is a global catastrophe. The UN World Tourism Organization (UNWTO) commented that world tourism faces ITS worst crisis since records began. In a piece in the Guardian headed, Antonia Wilson noted that the *"travel industry could see an 80 per cent decline in international arrivals for 2020 amid [a] crisis that threatens [the] livelihood of up to 120 million people".* In the article, the point was made that *"International tourism faces its worst crisis since records began, with up to 1.1bn fewer people taking trips globally in 2020. The scale of the Coronavirus pandemic's impact is outlined in a report by the World Tourism Organization (UNWTO), which predicts a decline in international arrivals of between 58 per cent and 80 per cent this year".* Thinking about the United Kingdom *"… Visit Britain has forecast a decline in inbound tourist numbers of 54 per cent for 2020, which equates to 21.9m fewer arrivals and a loss of £15.1 billion in tourist revenue. This scenario assumes a recovery of international arrivals from August and is subject to revision as the situation develops. In terms of domestic tourism in the UK, if the sector starts to open up in June, the annual loss will be an estimated £22.1 billion (£14.1 billion from day trips and £7.9 billion from overnights)"* (Wilson, 2020).

The Covid-19 pandemic and its impact upon the tourism sector is especially revealing about the public value of tourism and highlights the importance of understanding the relations between different levels or action situations with sets of actors involved in interactions, and especially the dialogue between visitors and residents.

Written in the midst of the Covid-19 pandemic following five months of restrictions in commerce and travel, this chapter reflects on the wider value of tourism and reveals, in the context of the Institutional Analysis and Development (IAD) framework (discussed in Chapter three) how an issue like Covid-19 foregrounds, and suggests a wider engagement of local value considerations to appreciate the wider value of tourism in destination areas which is presently dominated by economic interests and indicators. Tourism is viewed as a powerful force related to human development and the wider public good (Higgins-Desbiolles, 2006). At this time of crisis tourism may need to re-cast itself in wider institutional settings in different 'action situations' in order for its wider value to be appreciated. And yet the still dominant perspective of neoliberalism often prevails which is that *"…the market mechanism should be allowed to direct the fate of human beings. The economy should dictate its rules to society, not the other way around"* (George 1999 cited in Higgins-Desbiolles 2006, page 1194).

In a free market economy tourism exploits natural resources as a means of profit accumulation and as a source of private, and not public, value. This concept of unlimited gain and a stress on the accumulation of private value has led to the alienation of host from visitor communities through the exploitation of host communities, their cultures and environments (Wearing 2001, 2002 cited in Higgins-Desbiolles 2006). It has also maybe limited our appreciation of the relational dimension of tourism and its wider value in society at the local, national and international levels.

Tourism commodifies places and commercialises heritage, the built and natural environments and experiences, and judges its success on visitor numbers and spending. As a result, it is argued that tourism's full potential is squandered and its promise of many powerful benefits for humanity remains unfulfilled (Higgins-Desbiolles 2006). And yet, in addition to its economic value, tourism offers social, cultural and environmental benefits: *"Tourism … contribute[s] to the wellbeing of tourists by giving them restorative holidays that fulfil many human needs"* (World Tourism Organization 1999, Cited in Higgins-Desbiolles 2006, page 1192). Tourism is based essentially upon relationships, between citizens and their families and friends (and new friends found on holiday), between man and the natural environment, between cultures and countries, and between host and destinations and their communities and citizens.

Public value focuses on more than outputs associated with investments or what has meaning for people, or *"…what a public-sector decision-maker might presume is best for them."* (Alford and O'Flynn 2008b page 7). For example, an infrastructure development may be regarded as the outcome of a policy project, but often overlooks or fails to consider what the outcomes of that project are for people in their daily lives. Our approach to public value, developed through previous chapters, takes into account wider human values, offering a more human way of measuring the value of commercial activities and government performance. Such an approach can, it is argued, improve the relationship between government and citizens in policy contexts and in a tourism context, by embracing both generation and destination areas. It can also engage the public in more 'bottom-up' structures of co-creation in the design and delivery of policy and services and in tourism in the creation of relational outcomes by pointing at the 'experience economy' which realises the value of tourism in a wider social sense and in wider settings.

The scope and scale of tourism as an industry and as a cultural phenomenon makes it especially germane to a discussion of new governance architectures and arrangements in contemporary society. It has been argued that tourism is one of the most important forces shaping our world (Cohen and Kennedy, 2000, page 214). Tourism, it is argued, contributes not only to the wellbeing of tourists by giving them restorative holidays that fulfil many human needs and values, but it also provides benefits to destination areas through the economic benefits of visitor spending. In short, tourism provides significant public benefit. Moreover, to cite Desbiolles:

"Tourism is in fact a powerful social force that can achieve many important ends when its capacities are unfettered from the market fundamentalism of neoliberalism and instead are harnessed to meet human development imperatives and the wider public good…" (2006, page 1192).

However, a purely economic view of tourism fails to capture this wider value and it is argued that the real value of tourism to the public sphere can only be realised with a 'wider than market view'. In 1987, *Our Common Future* (WCED, 1987) highlighted the interdependent relationship between community quality of life and the well-known pillars of sustainability: environmental quality, economic prosperity, and social wellbeing (Rogers and Ryan, 2001). In order to achieve the global objectives, the UN's Agenda 21 was proposed as a blueprint for local action with an emphasis on community participation in decision-making (UNCED, 1993). Today, the SDGs provide a global perspective and policy solution for developing a solution to one of the most intractable, global problems confronting humanity: climate change.

The Covid-19 pandemic has led to travel restrictions in every county of the world during the second quarter of 2020, with the World Tourism Organization's most pessimistic forecast in April suggesting that by the end of the year tourism would have fallen by 78 per cent. The first sector to be hit hard was the cruise industry, quickly followed by aviation and then accommodation. Inbound and outbound tour operators everywhere faced collapse, with the entire visitor economy, including business, sporting and cultural events, hospitality, transport and attractions also struggling to survive behind closed doors.

Travel and tourism businesses in high income countries have, to a large extent, been able to weather the pandemic through fiscal interventions, although (by July 2020) after almost six months of lockdown, governments are starting to restrict their support, as public debt grows and tax revenues collapse, leading to business failures, redundancies and price rises. There has been some financial support in middle income countries, but this has mainly focused on those operating in the formal sector. The informal sector, which is the mainstay of the visitor economy in middle income countries, has essentially been excluded. In low income countries, especially heavily indebted least developed countries and/or those that are highly dependent on tourism for their income, governments do not have the capacity or resources to protect the industry.

Before the pandemic, the accepted model of tourism was one of continuous growth. There were several assumptions, that seemed reasonable in the pre-Covid-19 world, including:

- air travel globally would continue to grow, becoming more efficient and cheaper;
- entry restrictions would progressively be lifted, making tourism more accessible;
- the aspirational middle class in Asia would expand and travel more internationally;
- tourism would continue to contribute to the economies of established destinations;
- tourism would contribute to growth in emerging destinations, especially in Africa and Asia.

This model depended on global businesses operating large travel programmes that generated returns for shareholders but provided very little certainty for destinations that could lose their market on a whim. The Covid-19 pandemic has shown that none of these five assumptions is assured, and that they might all be wrong.

In 2019, before the emergence of Covid-19, there had been growing awareness of the need for action across the travel and tourism industry to advance the UN SDGs, especially in relation to consumption, inequality and climate, since 5 per cent of climate gases come from aviation, which is the industry's largest environmental impact. Initiatives include Tourism Declares and the SUN Program. Even Saudi Arabia, the world's largest oil producer, had put sustainable tourism high on the G20 agenda for the meeting it hosted in Riyadh in November 2020.

When the impact of Covid-19 started to be become apparent in March and April 2020, many organisations, including the UNWTO, asserted that this was an opportunity to 'build back better' and to put 'community' at the heart of tourism policy and strategy and destination planning and management. At the same time, the International Air Transport Association (IATA) was suggesting that, whilst it might take about three years for aviation to recover to its pre-Covid level, it would then accelerate beyond its pre-Covid trajectory, going *"back to normal with nobs on".* Other analysis, eg by Euromonitor, indicates that this 'Black Swan' event is so transformational, that recovery will take twice as long and will also lead to radical changes in travellers' attitudes and motivations.

Nobody has a crystal ball, but it is clear that there will be a significant hiatus in international travel. It is also inevitable that there will be failures and consolidation amongst the world's largest airlines, cruise lines, accommodation providers and tour operators. The question is what the impact of the current lack of tourism is, and what are the implications for the future of tourism.

The hiatus has resulted in economic impacts everywhere, but the environmental and social impacts are perhaps most significant. On a positive note, air and water pollution has reduced, marine and terrestrial ecosystems have had respite from excessive visits and the digitisation of museum collections has leapt forward. At the same time, many people have lost their livelihoods, leading to increased poverty and hunger, as well as incidences of domestic violence; health services have collapsed; food security has been lost with the disruption of agricultural production and supply chains; poaching and logging have both increased in protected areas around the world. The lesson is that, despite generating 10 per cent of global GDP and supporting 10 per cent of jobs, tourism is not the robust industry that so many people had assumed: it is not immune to a pandemic, and nor are all the people that rely on it either directly or indirectly. Many highly skilled staff have been lost to tourism, not only in low income countries where there is no safety net, but also in high income countries where the extended hiatus has resulted in oversupply. Change is therefore now inevitable.

During the hiatus, some small tourism enterprises have been able to pivot, because they are more agile and have lower fixed costs. Restaurants and hospitality companies have developed takeaway services and have made meals for vulnerable segments of the population, and even developed series of online cookery classes to whet the appetite of future customers. Minibus companies have become delivery services, while hotels have provided accommodation to health workers and the homeless. Meanwhile, large asset-based companies that typically operate on predictably high occupancy with very small margins cannot afford to change and will need to downsize to try to maintain their position against increasingly innovative competitors.

The tourism recovery will be led by domestic tourism, which is likely to dominate for at least a year or two into the future. This is partly because of continuing travel restrictions by governments around the world, but also because there is no vaccination yet available, many travel insurance policies will not cover Covid-19, and many people are not prepared to risk catching the Coronavirus or tolerate the inconvenience of all the safety and entry protocols and expenses involved with travelling during a pandemic.

Whilst the lack of international travel will restrict balance of payments, this will bring some respite for established destinations, especially in high income countries, such as France, Germany, UAE, UK and USA. Middle income countries where the domestic market has traditionally been strong will also benefit; examples include Brazil, China, India, Nigeria and Russia. However, there’s little chance of domestic tourism making up for the loss of international tourism in the world’s 29 lowest income countries, 23 of which are in Africa, including Ethiopia, Malawi, Rwanda, Sierra Leone and Uganda, all of which had been successfully developing their visitor economy before Covid-19 hit. If future tourism is to have real value, then it must be equitable, and this means that it must contribute to sustainable development everywhere, especially in the global south, where tourism has the potential to be the most transformational and beneficial.

The one sector that dipped least is luxury travel. In June 2020, whereas commercial air travel was 86.5 per cent down on the previous year (only a slight improvement on the 91 per cent in May), private air travel was only down by 30 per cent, indicating that those with resources are continuing to travel and suggesting that luxury travel is the most resilient. This means that those destinations that can reach and cater to this exclusive sector will be able to reap rewards. The lemma is that the longer the hiatus continues, the more likely international travel in the 2020s will resemble the exclusivity and inaccessibility of travel in the 1930s and 1950s.

It is likely that the multiple annual city-breaks will become increasingly uncommon, partly because capacity will be reduced and prices will increase as a result of airline failures and consolidation, but also because the inconvenience of Covid-19 travel protocols will mean that travellers will increasingly choose to take fewer trips, but which are likely to be longer and more meaningful. Just as destination communities will need to be able to trust visitors to act responsibly (and not bring the Coronavirus with them), so too will visitors want to be able to trust a destination that their experience will be safe and authentic. This means that the needs of both visitor and host must be aligned. The public value of tourism must become the advancement of the SDGs.

The performance of tourism in terms of public value is not indicated by the number and distribution of visitors and the revenue they bring, even if such data are necessary for policy development and destination management purposes. Rather, the public value of tourism is indicated by how it advances the SDGs.

Figure 11.1: The Sustainable Development Goals

For example:

To what extent does tourism create *'decent work and economic growth'* (SDG8) that makes progress towards *'no poverty'* (SDG1) and *'zero hunger'* (SDG2), whilst also contributing to improvements in *'good health and wellbeing'* (SDG3), *'quality education'* (SDG4) and access to *'clean water and sanitation' (*SDG6) and *'affordable and clean energy'* (SDG7) for destination communities?

To what extent does tourism support the sustainable development of *'industry, innovation and infrastructure'* (SDG9) in destinations through more *'responsible consumption and production'* (SDG12) to establish more *'sustainable cities and communities'* (SDG11), protecting *'life on land'* (SDG15) and *'life below water'* (SDG14)?

Despite the frequent negative environmental impact of tourism, especially through carbon emissions from aviation and other forms of transport, to what extent does participation in international tourism help establish *'partnerships for the goals'* (SDG17) while promoting *'peace, justice and strong institutions'* (SDG16) in order to advance *'climate action'* (SDG13), *'gender equality'* (SDG5) and *'reduced inequalities'* (SDG10), especially between high income countries and the global south.

Recently the World Economic Forum (2020) suggested that in this time of crisis, with the world in the grip of a global pandemic and with questions being asked about the inappropriateness of many systems for governance, commerce and societal relations, that there is an opportunity to reset governance and economic systems to better address global issues of common concern. In this context it may be that tourism has an important role to play in giving insights into the importance of dialogue, engagement and exchange at local levels in the face of broader issues like regional development, climate change and Covid-19.

One of the key things about tourism is the almost total dominance of the market. Presented statistically in respect of numbers of visitors, bed-nights and spending, tourism has, until today, been dominated by a neoliberal marketisation discourse. Economic value prevails yet, currently, little attention is paid to measuring the public value impacts of the tourism industry, and certainly nothing compares to the financial 'return on investment' calculations (Tyrell et al 2013).

"The tradition of tourism businesses and regional tourism industries is to measure their value to the host community by jobs, wages and tax revenues even though every member of that community is impacted on a daily basis though a broad variety of impacts". The authors go on to suggest that *"the major dimensions of community quality of life … can be influenced by the tourism industry …[creating an]… overall impact on the wellbeing of community residents"* (Tyrell et al 2013 pages 279-293).

Most of the discourse about tourism focuses upon private values and money. Insofar as communities and host publics are mentioned the claim is often made that tourism significantly enhances quality of life in host communities by providing employment services, infrastructure and facilities for residents, event events appealing to both host and visitor (Andereck and Vogt 2000); and Andereck, Valentine, Knopf and Vogt (2005).

Today, more than ever before, citizens are more engaged in both public policy decisions and commercial product development. Nowhere is this more important than in the tourism sector (Tyrell et al 2013). Increasingly, with higher educational levels in populations, more leisure time and a greater concern and interest in environmental issues coupled with a desire to be engaged in public policy and quality of life decision-making, in tourism, as in many other sectors, top-down market and decision approaches are being replaced by more dialogic approaches to decision-making with a 'citizen-centred' rather than 'consumer-centred' perspective increasingly coming the fore. This is especially the case in local settings in which communities are engaged in policy in structures of collaboration, consultation and co-production.

Tourism as a phenomenon may be considered as part of the 'experience economy' (Pine and Gilmore 1999 cited in Binkhorst 2006) in which consumers seek products in which the actual experience, intangible and immaterial, 'touches' them deeply and emotionally. In the UK, and in regional settings like Cumbria and Copeland, the experience of the visitor extends across a diversity of activities and a plurality of providers. Unlike resort settings where the experience is more isolated from the daily lives of residents, the UK domestic tourism experience is embedded in neighbourhoods, communities and places and the visitor experience is a wide constellation of encounters, scenes, transactions, activities and meetings. Unlike many services and products, tourism is unusual in that, to experience it, visitors must travel to the point of sale and delivery of the product and the experience economy, which intensifies the linkages and interactions between host and visitor communities, especially in areas like Cumbria where the communities occupy the same terrain.

Earlier we argued that human values underpin motivations to travel. Human values underpin public value and from a values standpoint, tourism is a response to the activation of particular categories of values, needs and motivations within a range of financial, temporal and geographical parameters. Though the human value set is universal, individuals may be distinguished by their prioritisation of the values active in a particular setting. Essentially, the values of tourists may be different from those of residents or members of a host community. As Gnoth (1997) argues, definitionally, the term 'tourism' may be said to denote the engagement of a particular set of values. Gnoth further argues that tourism may be considered as *"…a construct employed to denote significant psychological, social, and economic differences from other, similar behaviour during which people leave and return to their home"* (Gnoth 1997, page 283).

The push-pull theory, (Dann 1977) is the most widely recognised theory of tourism motivation (Muzaffer et al 2009). It argues that, in a general sense, tourists are believed to hold personal *values* that permeate their life and that embed their choice of a specific destination and/or target tourist experience (Madrigal and Kahle 1994). Such values, once directed at a specific target (i.e., a trip to take), give rise to travel *motives*, which function as the 'push' factor for the upcoming trip-taking (Oh et al 2007). In today's digital, impersonal, high-speed, commercialised globalised and computerised world, humans experience a triple alienation: from themselves, from each other and from nature.

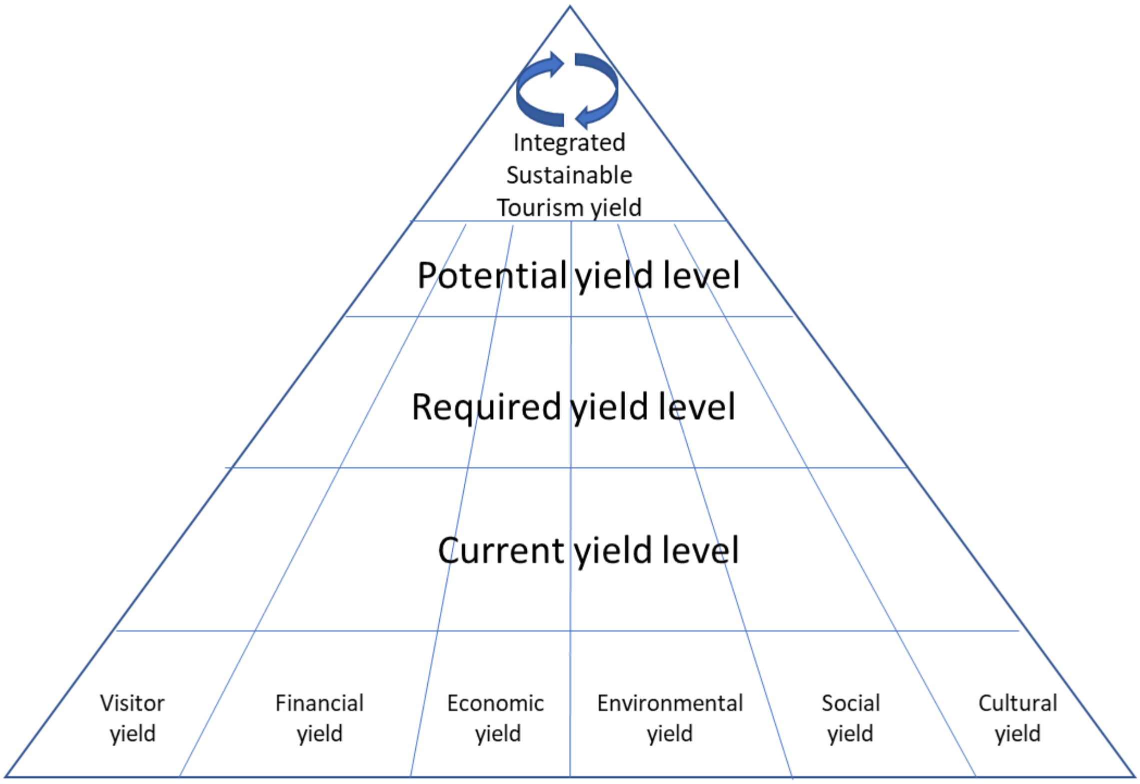
Dann (1977) gives a useful insight into the factors motivating individuals to become tourists. Firstly, the desire to transcend the feeling of alienation and isolation obtained in everyday life – the need that man has for love and affection and the desire to communicate with his fellow man. The second reason or category of need is that associated with ego enhancement which, to cite Dann, *"Like anomie… derives from the level of personality needs. Just as there is a need for social interaction, so too does man require to be recognized". (Dann 1977, page 187)*

In a study of 'push' factors in Korean national parks, Kim et al (2003) found that appreciating natural resources and health was the second highest motivational factor behind 'escaping from everyday routine'. Wellbeing in positive psychology has been operationalised as 'hedonic' wellbeing (happiness and pleasure) and 'eudaimonic' wellbeing (personal growth and optimal functioning). Hedonic views of subjective wellbeing are common in the tourism literature with happiness and pleasure being seen as the ultimate goal (Vada et al 2019). Searching for 'eudaimonic' wellbeing foregrounds tourist experiences and involves deep satisfaction as well as opportunities for learning, personal growth, and skill development (Pearce and Packer, 2013). In contrast, 'hedonic' tourism products and services are often categorised by excessive behaviour such as eating and drinking.

Their study found that tourists who feel hedonic wellbeing (or tourism satisfaction) are more likely to revisit the destination, talk about their experience and recommend the destination to others. In other words, the more hedonistic the experience, from the information gathered, the more likely it is for people to visit again. From a values and relational consideration, we speculate that hedonic enjoyment is fundamentally located in the relational values arena, while eudaimoia is a more personal, individual outcome. Again, the social nature of tourism is seen as key as is the wide spectrum of human values with which tourism engages and yet there is little recognition of the wider contribution of the industry to society and the public sphere beyond private value associated with market relationships. The Covid-19 pandemic has been especially revealing of this.

Thinking about the outputs and outcomes of tourism, Northcote and Macbeth (2006) argues that the trend towards sustainable development has led to a renewed interest in the impacts of tourism on the environment, society, and culture. They argue that, while there is an interest in sustainable development, there has been difficulty in conceptualising tourism's environmental, social, and cultural benefits as opposed to merely costs. To address this gap, they propose a model of 'Integrated tourism yield' (2006) which comprises six categories of outputs and outcomes to which the tourism industry makes a contribution in a community setting.

Figure 11.2: Model of integrated tourism yield framework (Northcote and Macbeth, 2006)



The model, which is especially aimed at tourism in developing areas, addresses visitor benefits, or 'yields' from the left and resident communities' issues from the right. At its apex the model suggests that sustainable tourism yield comprises a synthesis and amalgam of yield in all six categories. In this diagram 'Social yield' is especially relevant from a public value standpoint for the host population as it refers to *"…the way that tourism contributes to the social welfare of a destination, and to the way that the host community contributes to the social wellbeing of visitors and the wider, surrounding population. They suggested that criteria might include host/guest satisfaction (measured as a percentage of agreement by the surrounding community and/or tourists regarding the positive impacts … on their quality of life), equity, … community engagement or involvement, intergroup cohesion, and ingroup unity*" (Northcote and Macbeth 2006 page 216). However, they argue that tourism systems in destination areas are complex and that relationships within tourism systems between the yield categories may not be self-evident; that said, one can envisage cultural, social environmental and economic categories of tourism yield having a positive public value impact in a destination region though the actual mix will, as they say, be complex.

Especially relevant to our discussion is the levels of yield approach contained within the above model, with the ultimate yield level 'sustainability' creating a congruence between visitor and host communities, suggesting a trend towards sustainable development at the micro-level of tourism destinations. Their framework reveals the potential value of tourism and the wider public good associated with tourism which may be considered as *"…a powerful social force that can achieve many important ends when its capacities are unfettered from the market fundamentalism of neoliberalism and instead are harnessed to*

meet human development imperatives and the wider public good" (Desboilles 2006 page 1192). Tourism, in short, has public value, and many areas as potential host destinations seek opportunities for tourism in their community in order to satisfy their economic, social, and psychological needs and to improve the community's wellbeing. As Ap argued…
"…attracting tourism to their area is generally driven by the desire by some members of the community to improve the economic and social conditions of the area." (1992, page 668).

Especially relevant to our discussion is the levels of yield approach contained within the above model, with the ultimate yield level 'sustainability' creating a congruence between visitor and host communities, suggesting a trend towards sustainable development at the micro-level of tourism destinations. Their framework reveals the potential value of tourism and the wider public good associated with tourism which, in short, has public value, and many hosts destinations seek opportunities for tourism in their community in order to satisfy their economic, social, and psychological needs and to improve the community's wellbeing.

In a destination, therefore, the needs of the visitors have to be satisfied because providing quality experiences for them by the host community will increase the desire for further interaction between hosts and guests (Hudman and Hawkins 1989). However, the encounters between them may also lead to negative experiences. Knox commented that, *"The tourist may have his vacation spoiled or enhanced by the resident. The resident may have his daily life enriched or degraded by the unending flow of tourists"* (1982 page 77)

The almost universal experience of lockdown means that the countryside is a major draw for people wanting to travel again. It is reminiscent of the FMD experience when people in cities were desperate to get 'out of town' but multiplied many times over. The idea of a gentle walk with birdsong beside a river, a digital detox away from countless video conferences or a retreat in a spa hotel are all understandably attractive. However, whilst rural enterprises were happy to restart rural tourism and to welcome visitors back to the countryside and many involved in farming and forestry successfully diversified or even transitioned to become primarily tourism providers, the situation is very different for rural villages in the midst of the pandemic.

Whether in the Highlands of Scotland, foothills of the Himalaya or savannas of Africa, many village communities are fearful of visitors bringing Covid-19 into their midst, especially given the paucity of medical facilities in many rural areas and the continuing absence of a vaccine. Of course, rural businesses (including accommodation providers, restaurants and local shops) have missed tourists and perhaps in some cases hadn't appreciated how much they were part of the visitor economy, but they are also scared of the Coronavirus.

Throughout the world, there is the added risk of anthroponosis (reverse zoonosis), whereby Covid-19 could pass from infected humans to other mammals. This is a particular risk in the Tropics, where there is a real danger of infecting our closest relatives (including gorillas, orangutans, bonobos and chimpanzees), all of which are endangered and are a cornerstone of the natural heritage attraction and visitor economy of the countries in which they live.

Destination communities need to be involved in tourism planning and destination management. The term '*over*tourism' that had been such a feature of tourism discourse until Covid-19 was inaccurate, because it actually represents *under*management instead. For too long, destination communities have been commoditised and treated as part of the landscape as a component of the visitor experience, and this needs to change. Covid-19 is both a crisis and an opportunity for tourism. Covid-19 therefore provides an opportunity to consider the public value of tourism globally.

The FMD experience in Scotland showed that, if well planned and if there is effective engagement, tourism could bring significant benefits to the rural economy, creating jobs, reducing urban migration and protecting the environment. It was also able to create marketable and authentic visitor experiences. The recovery of Scotland's rural visitor economy through the sustainable development of nature-based tourism demonstrated its public value and provided a foundation and justification for public support for tourism.

Covid-19 has demonstrated that, when humanity is not living in harmony with nature (i.e. by eating wild animals and encroaching on their habitats), it can lead to conflict and even crisis. The way we are living is unsustainable and, in reality, we haven't even started to tackle climate change, for which Covid-19 is merely a dress rehearsal. Responsible travellers know that the tourism model needs to change if destinations communities are to continue to host visitors and if visitors are to have genuinely authentic and autochthonous experiences. The travel industry knows that it must rapidly develop and adopt new technology to survive.

Tourism is fundamentally about people, ways of living and environments, and it cannot be treated in the same way as manufacturing or mining. It requires ethical thinking which is only now being properly explored in the tourism field (see Smith and Duffy, 2003). However, in an era still dominated by markets and marketing, people often view tourism as an 'industry', particularly the people in the 'industry' itself! Today, much of tourism operates on an industrial view of the tourist destination with its people, scenery, culture and activities commodified and sold to the tourist consumer *'…with all of the logic of profit extraction and exploitation that this entails'* (Higgins-Desbiolles 2004).

As Allen et al observed *"Unfortunately, many state and local governments attempt to optimise economic benefits {of tourism} with little regard to the social and environmental cost associated with tourism expansion"* (1988 page 16). The impacts of tourism therefore need to be monitored on a continuous basis if adverse effects are to be avoided, or at least ameliorated, and the benefits maximised (Faulkener and Tideswell 1997). In this context, Doxey's (1975) 'Irridex' model suggests that communities pass through a sequence of reactions as the impacts of an evolving tourism industry in their area become more pronounced and their perceptions change with experience. Thus, an initial euphoria is succeeded by apathy, irritation and, eventually, antagonism (cited in Faulkener and Tideswell 1997). These sentiments have come into sharp relief in the Covid-19 lockdown when people have been denied opportunities to travel and, as lockdown conditions are gradually eased, like a cork out of a champagne bottle, accessible destinations become quickly overwhelmed by visitors with a consequent negative reaction from residents or host communities.

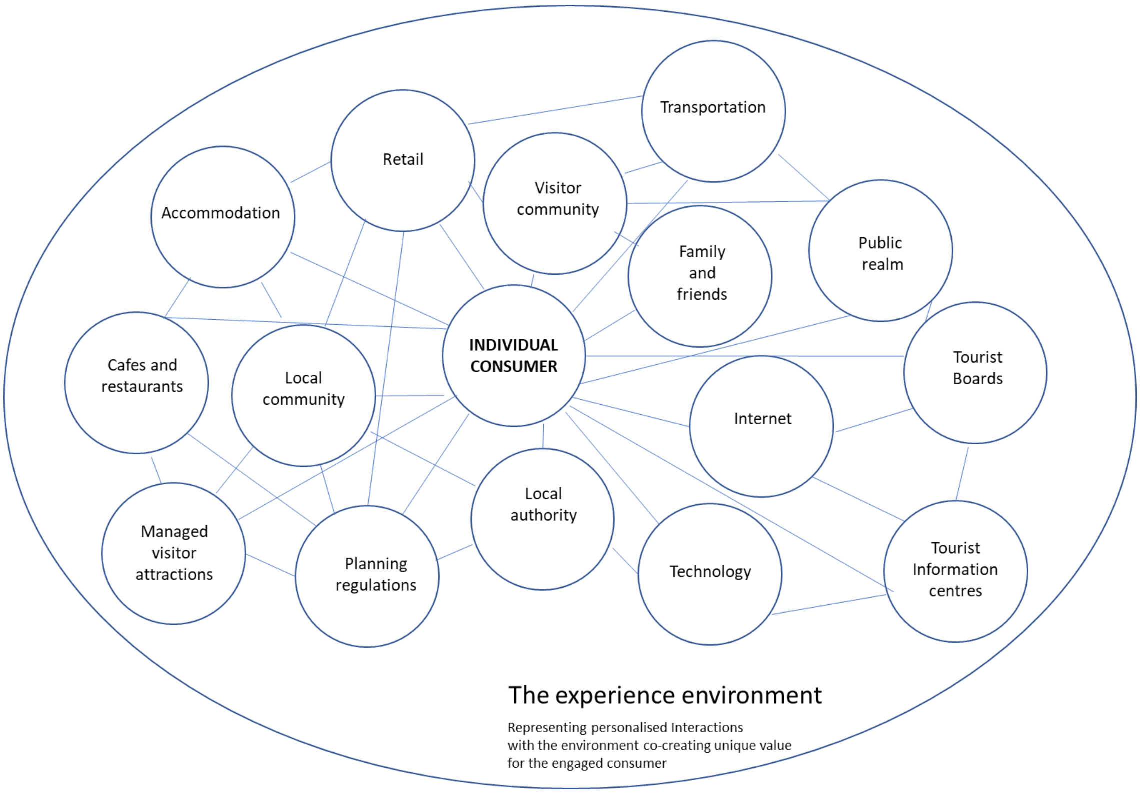
A piece in the Daily Post on 6 June 2020 under the heading *"Tourism in Snowdonia is set to look very different after Covid – and these are the big changes in the pipeline"* revealed longstanding tensions between resident and visitor communities and a change in tourism strategy as a consequence. It said: *"Long-running tensions between visitors and local communities have been brought into sharp focus by the lockdown, prompting Snowdonia National Park Authority (SNPA) to "explore options for recovery and renewal". Key to this is a new marketing strategy designed to create high-value tourism with longer stays, greater spending and high-end facilities".*

And in the English Lake District on the same day the Daily Mail reported *"A Local government Association (LGA) spokesman also said local councils were reviewing car parking provision but would 'balance this against avoiding the gathering of large crowds where social distancing will be difficult to maintain".* One popular Lake District community group *"descended into hate"* as people debated if tourists should be allowed or not. A man commented on the Facebook page*: "There is going to be a lot of vehicle vandalism".* One person wrote: *"I'm gagging to get up to the Lakes but I won't be going simply because I'm worried about my car being vandalised by angry locals while I'm up a hill".*

All of this seems a long way from the integrated experience economy in which positive integration between the tourist and host community is central to the co-creation of a good visitor experience. As Prahalad and Ramaswamy suggest, *"In the experience space, the individual consumer is central, and an event triggers a co-creation experience. The events have a context in space and time, and the involvement of the individual influences that experience. The personal meaning derived from the co-creation experience is what determines the value to the individual*". (Prahalad and Ramaswamy, 2003, page 14).

Prahalad and Ramaswamy) speak of an 'experience environment' referring to a space where dialogue can take place between company and consumer and map out the constellation of actors who may be involved in this complex set of interactions. The following diagram gives a sense of the complex network of actors potentially involved in a hypothetical 'experience environment' surrounding an 'Individual consumer' or tourist in this case. From a public value standpoint, we see the range of actors involved in this complex, polycentric network with multiple sectors and relationships and with a plurality and diversity of what might be termed 'value opportunities' to engage with the consumer.

Figure 11.3: Representation of complex, polycentric network creating the experience environment (after Binkhorst 2005 and Prahalad and Ramaswamy, 2003



From a public value management standpoint, with its focus upon collaboration and co-ordination between a diversity and plurality of actors, tourism may be envisaged as an example of a wider ‘experience network’, in which a constellation of stakeholders engage to co-create a tourism experience within a regional setting within which there may be discontent and disagreement with the prevailing state of affairs. As John Ap noted:

“To sustain tourism in a community, certain exchanges must occur. Participation by a community (residents, civic leaders, and entrepreneurs) in developing and attracting tourism to their area is generally driven by the desire by some members of the community to improve the economic and social conditions of the area. For others in the community, tourism is thrust upon them by certain individual or group advocates. Irrespective of how tourism is introduced and developed in a community, residents are important players who can influence the success or failure of the local tourism industry.” (1992, page 668).

From a policy standpoint such an ‘action situation’ (Ostrom 2012) may be very large indeed, reflecting the disparate nature of the tourism experience in the UK, especially in places like Cumbria including the local community, the industry, the tourist and enablers including information and transportation providers. It is in effect an ‘Actor-network’ (Law and Hassard 1999) in which the condition and accessibility to the biophysical environment must be seen as an integral part of a total system.

Binkhorst (2005) argues that with the growing interest to learn about other cultures and places through the tourist experience, visitors are no longer just ‘at’ a destination, they are ‘in it’ as part of a place which, for a brief period, they become a part of. This is moving towards, albeit briefly, becoming ‘existentially inside’ the community (Relph 1976) and it is a much richer ‘place-based’ relationship than that is often envisaged for a tourism destination.

Prahalad and Ramaswamy) note how *“In the experience space, the individual consumer is central and an event triggers a co-creation experience. The events have a context in space and time, and the involvement of the individual influences that experience. The personal meaning derived from the co-creation experience is what determines the value to the individual”*. (2003 page 14). As actors in the position of looking for new ways to differentiate their offer in a crowded, competitive visitor economy, it may be that public value is part of a new commercialisation approach to the design and delivery of tourism. From this perspective consumers and local communities each gain more value from a more engaged offer and this engagement in an ‘experience’ economy and offer may help sustain a controversial industry.

Here, insights from Copeland Borough Council are especially revealing, by capturing the essence of an experience ‘offer’ as a core component of a sophisticated marketing strategy which

“When you think of the Lake District, what springs to mind? Is it the hustle and bustle of Windermere, the shrine to the Lake Land poets that is Grasmere, you might even remember the hurtling Bluebird on Coniston or the last anorak you bought in Ambleside? Are they really the best the Lake District has to offer?

You should venture a little further to Copeland. It is the very epitome of Cumbria and its people. It quietly goes about its business, without making a fuss or needing to be the focus of the world’s attention and yet you can find everything the Lake District has and a great deal more.

There is the highest of its mountains, the deepest of its lakes, farmers tending their Herdwicks and even poets. You can add to that a rugged coastline with its own amazing beauty and an authenticity added by its people. They are genuine, measured, yet proud, people who can still trace their lineage to old Cumberland. They are what remains of the original Lake District, a true rare breed.

Copeland is there for those who are in the know, for those connoisseurs of the Lake District struggling to get beyond the pastiche of the honey pots. It is the Lake District where the locals live and where their neighbours come to visit to remember what life in The Lakes should be like. Visitors are welcome but they are treated with care and offered traditional Cumbrian hospitality. Copeland is using the lessons learnt elsewhere to ensure it remains authentic, grounded and stays true to itself but welcoming to all. The true embodiment of the “Experience Economy”

(Katie Reed, Copeland Borough Council 2020).

For Copeland Borough Council’s Tourism Officer, Katie Read, the experience economy delivers more eudaimonic outcomes, and is about engagement and relationships associated with self- and social actualisation, based upon a richer engagement with places, people and publics. She argues that…

“Tourists want to enrich their daily lives by experiencing new things and undertaking activities that deliver self-improvement, enjoyment and revitalisation. Sampling new, unique and aspirational experiences provides consumers with the opportunity to develop new skills, acquires new knowledge and thus boosts their share of social and cultural capital with social media channels as the shop window. The desire to collect “stories” underpins so many of our consumption choices: new experiences are sought in order to build memories, social media has become a living journal and portfolio of our daily lives, which naturally increases the demand for experiences to fuel our online story platforms.

One driving motivation for travel is the desire to collect unique experiences; the ultimate souvenir is a lasting memory. At its fringes this trend boosts interest in rarer experiences and unvisited places – because a story uncollected by others is more exceptional and thus more valuable. The increasing ability to personalise trips and create bespoke tours, even for travellers on a budget, gives rise to a wider range of unique experiences which everyone feels entitled to enjoy. Many experience led holidays focus on disconnecting from the internet, to further absorb oneself in the present. A craving for meaningful human interactions and a sense of belonging in a world dominated by technology drives the desire for immersive, intense, off-the-beaten track experiences“. (Katie Reed 2020)

Today’s experience economy has evolved, and perhaps the hallmark of the contemporary experience economy is authenticity. As Binkhorst and Den Dekker 2009 argue referring to the early experience economy “…*the reaction to the [early] experience economy tend[ed] to be one of warning against the creation of staged experiences that are considered too commercial, artificial and superficial and therefore not always suitable to attract customers…”.* Earlier, Binkhorst argued that *“Modern consumers want context related, authentic experience concepts and seek a balance between control by the experience stager and self-determined activity with its spontaneity, freedom and self-expression. This is also offered with the concept of creativity that recently popped up to explain why consumption is increasingly driven on the need for self-development”* (Binkhorn 2006 page 2).

In what might be termed the ‘second generation experience economy’ (Binkhorst and Den Dekker 2009), co-creation becomes an important part of the experience economy, with customers, suppliers and intermediaries engaged, via new institutional structures, in dialogue about the visitor experience. In these new structures there is clear scope for a value-driven, dialogic relationship between visitor and host communities. This new approach is exemplified in Copeland’s tourism strategy (Reed 2020).

In the Covid-19 crisis there is talk of a reconstruction of society, and of a new engagement within society regarding issues of allocation, a stakeholder economy with dialogue and engagement at its heart. HRH Prince Charles speaking at the World Economic Forum’s Great Reset initiative launch on 3 June 2020 argued that…

"There is a golden opportunity to seize something good from this crisis...global crises know no borders and highlight how interdependent we are as one people sharing one planet".

Echoing this, The Secretary-General of the United Nations, António Guterres, has issued a powerful statement of support for the global tourism sector, calling for the industry to be a platform for overcoming the effects of the Covid-19 crisis, saying that "Tourism can be a platform for overcoming the pandemic. By bringing people together, tourism can promote solidarity and trust – crucial ingredients in advancing the global cooperation that is so urgently needed at this time.

But though tourism can have a significant role to play in the future there are issues in the relationship between hoist and visitor communities. Thinking about residents' perceptions of tourism Faulkner and Tideswell (1997) reflected on the – sometimes massive – growth of the industry creating increasing concern and even conflict in resident or host communities in respect of tourism's perceived impact on their lives. This observation may be prescient and relevant in today's Covid-19 recovery as antagonism grows as a result of the risk of infection from visitors in otherwise isolated communities. The authors propose that two sets of factors are associated with the tourism development/community interface,

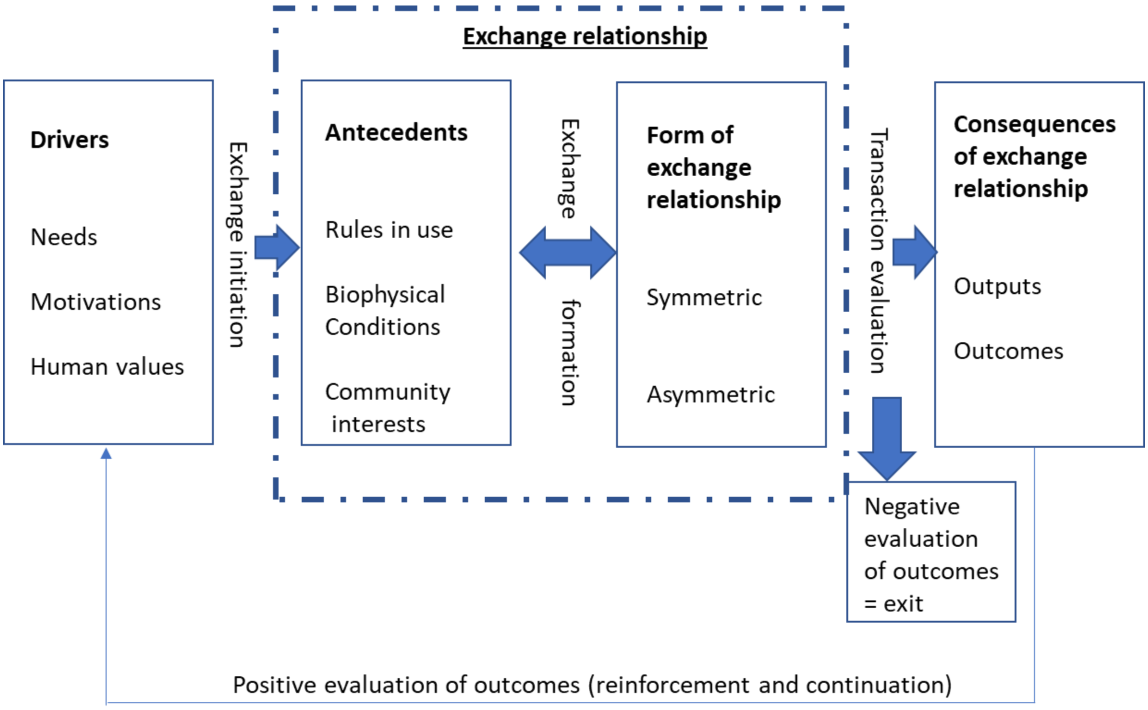
Firstly, *"…the extrinsic dimension, which refers to characteristics of the location with respect to its role as a tourist destination — including the nature and stage of tourism development in the area and, reflecting this, the level of tourist activity and the types of tourists involved; and"*

Secondly *…"the intrinsic dimension, which refers to characteristics of members of the host community that affect variations in the impacts of tourism within the community."* (Faulkner and Tideswell 1997, page 6).

In discussing the intrinsic dimension, they found that Ap's use of social exchange theory (1992) to be especially relevant to their investigation, in particular as regards the impact of dialogue between visitor and host communities which is found to explain a significant, positive, effect on perceptions of tourism and visitors among residents and presumably of residents among visitors. But from a public value standpoint, we see the importance of a wider-than-economic relationship between tourism as an activity and a host community in being a key factor in the local acceptance of tourism and the visitor economy, and engagement with it in respect of their being part of the wider and deeper 'experience' environment.

Ap's model of an exchange relationship between tourist and host communities (1992) which we have modified to include aspects of Ostrom's IAD framework and rendered below gives a useful perspective. It shows that a positive evaluation of tourists by a host community is often based upon the perceived congruence between their motivations and motives (the basis of needs and values) and the perceived outcomes of interactions with tourists. From a public value perspective it may be that many of these outcomes may be associated with a range of value categories not recognised or appreciated by economic measures Revising the Ap model to accommodate public value reveals that though there may be an asymmetry of perceptions and values within and between host and visitor communities there may nonetheless be wider value perceived by both groups not adequately captured by purely economic valuations (though this will undoubtedly still be very important).

Figure 11.4: Rendering of hypothetical exchange relationship between clients and suppliers calibrated for public value. Structure based upon Ap (1992) with content drawing upon terminology from Ostrom's IAD Framework (2012)



The dynamic of the Ap model flows from the left, with interactions or exchanged being initiated in pursuit of the realisation of values or needs. Actors in this model may be seen as individuals or institutions. Within the exchange relations space we see the context of rules in use as an antecedent associated with the exchange relationship between actors. From a tourism and host/visitor community relationship the host community may have significant resources to bring to bear upon the interactions in the form of their engagement with the experience economy space created within a destination, especially given the wider network of relationships within which they are engaged (in countries like the UK) with, among others, local government and politicians.

The translation of values and the framing of a tourism offer and product into a powerful proposition within the authorising environment of policy actors and commercial organisations operating in policy space for licencing and planning reveals the political value of public value. On the above rendering of a modified Ap model the outcome of the exchange is represented by a binary positive or negative evaluation of the exchange resulting in an exit from the relationship if the exchange is perceived as inconsistent with an actor's values and needs.

This brief analysis of we have modified the elements of the model to include values and needs and drawing upon Ostrom's IAD framework locate the exchange relationship within an action situation framework and with the wider context of outcomes. The exchange relationship model is instructive here as it incorporates relations in the interaction space of the original Ostromian framework and provides a way of envisaging interactions in respect of the symmetry of power relationships within exchanges. One of the key issues in networks is polycentricity, with power and influence being diffuse, dispersed among the actors engaged in interactions. The modified exchange model rendering above locates a diversity of values within policy or exchange space. It also accommodates antecedents such as the setting of rules shaping interactions, and also consistent with the IAD framework, locates evaluations of outcomes as related with the engagement or exit of actors.

In the context of networked governance, the fundamentals of the above approach give an insight into the importance of relationships between individuals at the heart of governance relationships in its networked form (Stoker 2006). Networked governance may be characterised as a mode of governing involving a broad constellation of actors and interests and an increasing emphasis on local perspectives in policy and decision-making, involving a plurality of players and a diversity of perspectives and in networked governance, many participants are potentially seen as legitimate actors. Such a model of exchange relationships as seen above in a tourism context affords insights, we can draw upon for wider application in public value governance. We have argued that this model has similarities with the IAD framework and the central action situation focusing on relational elements focusing on the individual actors – people's daily lives in the resident, host communities, but these action situations shaped by developments in a wider network of action situations.

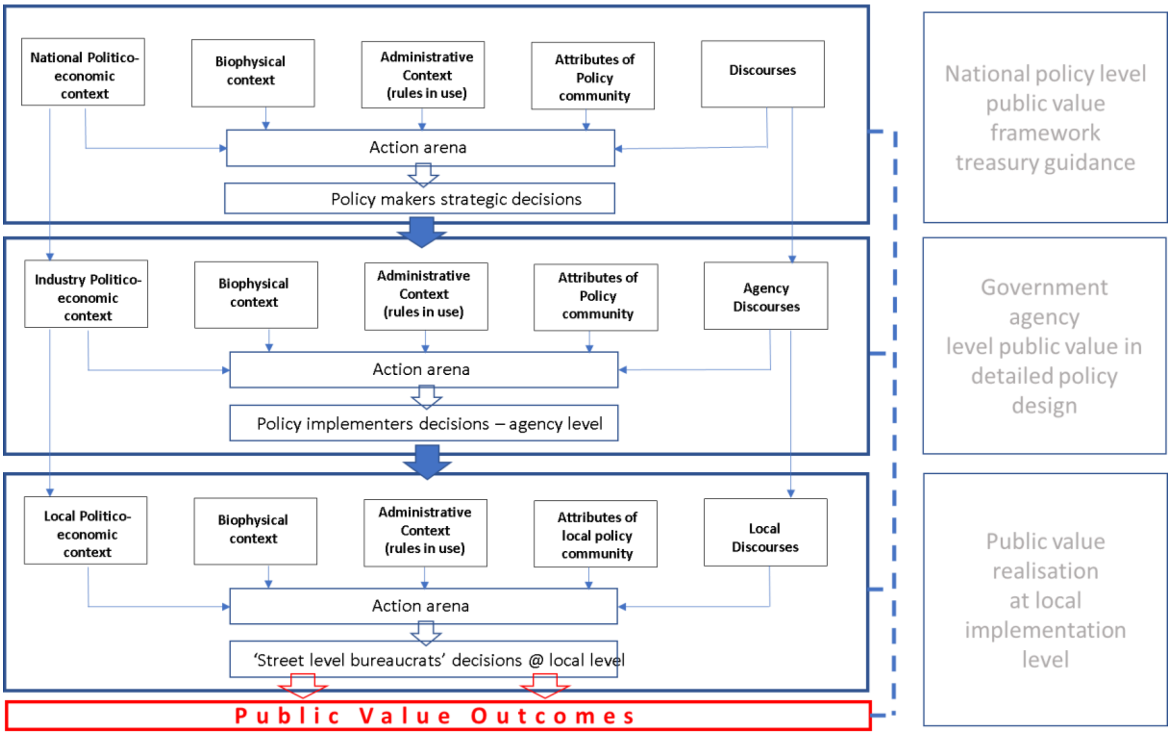
From an experience economy standpoint, given the importance of the community, the interaction between residents and visitors is key for providing sustainable experience economy 'product'. A public value approach to tourism in localities which engages networks actors emphasises all categories of human value (especially relational values) to create a meaningful and sustainable visitor experience. The exchange relationship model, drawing upon the IAD framework, suggests an approach in which public value forms a motivational dynamic accommodating resident, industry and visitor value priorities, perspectives and positions and a diversity of value positions and discourses. Within these structures a public value narrative provides a common language and lexicon for the accommodation of interests and issues at multiple levels of analysis which is important giving the multiple scales of tourism and the tourism industry in which national and international levels of policy and commerce impacts upon localities.

In addressing some of the greatest issues confronting society, such as climate change and Covid-19, the local level is key. Tourism highlights how global issues are a gestalt of local practice and individual actions. As Andersson argues in a paper on the implementation of the IAD framework in "*Regardless of how resource policies at the regional, national, or international levels might change, the ultimate effects are filtered through the local context"* (2006 page 27). This is certainly the case with climate change abut is especially true in tourism which is fundamentally about people visiting localities outside those in which they live and work and in which attributes of a place form a key motivation to engage in an exchange between visitors and host communities. Tourists move, in effect, between localities and there are significant implications for the sustainability agenda. Public value governance foregrounds the local level as the key.

Drawing upon our earlier discussion which points the way to address the key issue of sustainable development with a range of actors across a number of levels in dialogic relations and ultimately within the same public sphere. The following diagram renders a multi-level model of interactions associated with climate change. It reveals the importance of the local level where public value is ultimately realised in policy and action situations and upon which other policy levels bear as discussed in chapter three. In these complex interactions the concept of public value remains constant across all levels and, though the priorities *in situ* may be distinctive, the fundamentals of public value are common across all three levels shown below. As the diagram describes, the internationally agreed Sustainable Development Goals could be seen as forming an upper level Ostromian action situation informing rules in use and shaping evaluative criteria associated with policy interactions globally. These goals have a fundamental public value dimension, recognising that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

As the middle level of analysis, the diagram could include, the UK Treasury's public value framework which "*define[s] everything that a public body should be doing in between to maximise the likelihood of delivering optimal value from the funding it receives. It sets out the activities that are required to turn public money in to policy outcomes, creating a set of criteria that can then be used to assess the extent to which those activities are taking place and, by extension, how likely it is that value is being maximised"* (UK Treasury 2019, page 5). However, at the present time the public value framework does not appear to be widely engaged with or implemented, especially across the diffuse tourism sector, but it does provide guidelines within the context of government spending and there is a framework in place which could be seen as setting rules in use to shape interactions and evaluate outcomes at the local level.

Figure 11.5: A levels of analysis approach to multinational issues based upon Ostrom's IAD framework accommodating local, national and international politico-economic contexts and discourses.



One of the defining points of public value is its focus on individuals in their daily lives. From an IAD standpoint, this foregrounds the importance of the local implementation level and is consistent with the new localism agenda and the rise of 'bottom-up' decision-making and the engagement of local communities. Moreover, this is consistent with the trend for a wide range of participants to be involved within policy space in new governance architectures and arrangements in which decisions at broader levels are shaped by, and themselves impact upon, dialogue with citizens in the public sphere. These new local governance structures as 'action situations' may be characterised by the inclusion of a wide range of actors and Ostroms's rules of boundaries and position in IAD structures may be increasingly difficult to use in fluid, dynamic policy structures operating across sectors, levels and geographies. In these situations, the role of public value as a common language and narrative which itself does not rely on rules, financial incentives or markets to act as a unifying dynamic, could be key.

The tourism sector is an example of the importance of a wider-than-institutional view of policy and shows the promise and potential of public value management as an overarching paradigm for governance in an era of polycentric networks. At a time when there is talk of a 'resetting' of society (Strongin and Mirabal 2020) it may be that the motivational dynamic which is argued to be a strength of a public value management approach to public administration, in which public value acknowledges and accommodates diversity and creates a unifying and motivational dynamic in complex, multi-level policy architectures of network governance. This new mode of public administration with its focus upon effectiveness and outcomes and new public management with its focus upon efficiency and outcomes). In a public value management model, we see the role of citizen as participants and as co-producers of services and delivery, as exemplified in this chapter by the tourism sector.

In review

Tourism as an 'experience economy' is fundamentally about the exchange and sharing of value between host and visitor communities in sensitive and valued biophysical settings. With its fundamental motivations in human value – among both visitor and host communities – tourism can provide a significant amount of public value. However, at the present time the much of the public value of tourism goes unappreciated as a consequence of the almost complete focus upon economics and delivery of private value. However, a local level discourse and narrative based upon an appreciation of the interests, needs and values of local communities is essential to the real-world realisation of the delivery of value to citizens and communities. Here, this discussion of the tourism industry has been revealing and insightful.

In this era of Covid-19, important aspects of the value of tourism have been revealed as citizens feel the loss of the relational, hedonistic and eudaimonic value that tourism provides, both for day and holiday trips. Moreover, the scale of tourism and travel as a global issue comes into sharp relief, as does the relationship between tourism and the natural environment and sustainable development.

Tourism foregrounds experience and exchange. Of special relevance are relational values which, within the entire gamut of human values, foreground the physicality of engagement, which is prized in an increasingly cool, computerised, digital world. Tourism and the visitor economy show more widely that the local level is key for the delivery of value and the common good – the realisation of public value and this is based upon interactions across a range of sectors and social settings.

From a policy standpoint the tourism sector, comprises a broad range of actors, resources and action situations. Perhaps more than most, the tourism sector is polycentric, with many levels within which a range of actors interact within complex policy networks, with sometimes overlapping domains and jurisdictions.

Using the tourism sector in the UK and overseas as a vehicle, this discussion of the tourism sector, with its focus on dialogue and relationships and with its global reach, embracing a totality of hosts and destinations, provides an insight and a search for a richer, more engaged relationship between individuals and communities of destination which may point the way forward as society looks for a new paradigm in the aftermath of the Covid-19 crisis in which current systems of governance and allocation are often seen as lacking.

Tourism can and will continue to be about self-indulgence, experience, escape and hedonism, but this must be in a way that also contributes to the sustainable development of the destination. There is nothing worthy or puritanical about this new tourism, but it must have a public value that assigns value to the destination community, which in turn will enhance the value of the visitor experience. The public value of tourism lies in the combination of both the visitor and host experience, which is far greater than the simple sum of the parts. It is all about mutual respect and mutual benefit.

From a sustainable development perspective, we have argued that a public value governance model provides a unifying 'force' in complex, nested policy settings which shape the creation of value in society by providing a way of coping with demands for new forms of relationship and for a more engaged public and creating a lexicon and narrative for its expression.

This discussion of the public value of tourism has revealed how the dominant narrative associated with the marketplace and money conceals what is emerging in the form of a richer, more human-centric approach to tourism policy and practice. This realisation will benefit visitors and destinations alike, through creating dialogue and understanding and the accommodation of diverse perspectives and positions on issues which, on a wider scale, may point a way forward for society to address more pressing existential crises such as climate change.

12. Working with public value: Towards a public value university

Rick Wylie and Graham Baldwin

In this chapter we bring together the psychological construct of values with structural settings and governance networks to consider how a university could operate to optimise its public value – that is, its contribution to society and the common good. Drawing upon the frameworks and theories and insights described and discussed in previous chapters, and upon insights from our own initial steps towards the implementation of a public value university at the University of Central Lancashire (UCLan), and our institutional thinking of these issues, we posit a hybrid approach to addressing some of the key problems and issues confronting a university at the present time. We then turn to the organisational implications which require a wider assessment of value contribution made by a university beyond markets for services, students and staff, and a consideration of the importance of recognising the university's fundamental public value contribution to society. We weigh up the issues and opportunities arising in the design and implementation of a strategic public value management (PVM) approach to a regional university.

Drawing upon our own thinking in UCLan we consider the changing university paradigm in recent years, the university's engagement with the public sphere, and the emergence of what has been called a 'new paradigm' for universities which the current Covid-19 crisis throws into sharp relief. In order to also appreciate the value of what we do as a university and the contribution we make to society, our students and our region and, as we develop a university strategy for the next decade for a post Covid-19 world, some of the lessons and limitations of a public value approach in relation to the university sector are revealed that we suggest could provide insights for wider application across all sectors.

Thinking about public value as a 'paradigm' for policy and practice suggests a focus upon things other than hard outputs associated with activity, instead seeing softer outcomes as being the goals of policy and practice. Currently, however, the dominant paradigm in higher education (HE) policy is that of new public management (Cremonini et al 2014) in which excellence is equated more with financial efficiency than public value. As we look at UCLan as an exemplar of a public value institution, we see a relationship between public value and current practice and policy and how, far from it representing a complete break with the past and a new paradigm, it represents an evolutionary development rather than a revolutionary change to what we do now.

To frame our discussion, we draw upon the seminal strategic public value management framework of Mark Moore (1995, 2013) and apply it to our university situation. This reveals the tension between the reality of commercial markets for university services and the concept of a public value management paradigm. We bring together our thinking in light of practical realities by positing a hybrid approach to public value management which we see as an evolution of the new public management paradigm. In so doing, we illuminate the importance of external relations and network management in respect of organisational capacity and the relevance of capturing public value outcomes as outcome measures of efficiency and effectiveness. This discussion is based upon the reality of the policy environment in which we work in a regional setting and to which me must respond.

As we will see, this can meld the key objectives of new public management with its defining objective of managing inputs and outputs in a way that ensures economic efficiency and responsiveness to consumers with Stoker's conception of public value management as a key objective with its overarching goal is achieving *"… greater effectiveness in tackling the problems that the public most cares about…"*. (Stoker 2006 page 44).

One of the keys to appreciating a university's role in providing public value is its position at the centre of many regional networks. In institutionally 'thick' regional settings universities act as anchors in both policy and commercial networks and in society itself due to their economic scale and physical and reputational status. They are an important element of place creation and some, like UCLan have been a feature of a place for many years (for example the University of Central Lancashire as founded in Preston in 1828). Universities are also uniquely positioned in global knowledge economies and regional innovation networks and in this chapter, we'll consider the role of a regional university and the implications of the turn to public value for its management and decision-making within complex networks.

Public value is essentially value to society – positive benefits produced in the public sphere perceived by citizens bearing upon individuals as they go about their daily lives. From a management standpoint public value is about responding to citizens' preferences and the provision of valued outcomes but it's also about the outcomes that are produced indirectly, and that are unintended by the institution yet appreciated by society. The dominant focus of public value as a management paradigm is upon relationships and these relationships begin with engagement in networks of deliberation that identify public value preferences and achievements (Stoker 2006). In the other case studies, we report the results of public value consultation that reveals the very significant level of public value associated with projects, policies and programmes based upon public assessments of outcomes well beyond the envisaged outputs within the scope of business plans or strategies.

As we will see, a key element of a public value approach reveals the difference between a 'consumerist' approach to HE with the relation between the institution and the delivery of services in the marketplace seen as the sole source of value and in which *private* value is the ultimate goal, which is to be contrasted with a *public* value perspective. Regarding the latter, we see the importance of dialogue, deliberation and engagement with stakeholders within the institution and how a public value approach gives an understanding and appreciation of the contribution of a university to society.

This wider perspective on the value of a university was highlighted almost a decade ago, with amazing foresight, by Simon Marginson who summed up issues surrounding the role of a university quite succinctly.

"Policy debate about whether to maintain public subsidies for higher education has stimulated reconsideration of the public mission of higher education institutions, especially those that provide student places conferring private benefits. If the work of higher education institutions is defined simply as the aggregation of private interests, this evaporates the rationale for higher education institutions as distinctive social foundations with multiple public and private roles. The private benefits could be produced elsewhere. If that is all there is to higher education institutions, they could follow the Tudor monasteries into oblivion" (2011 page 411).

As a background to this discussion we draw upon wider systems approaches to regional universities and their knowledge economy. These systems perspectives of universities and the values they create in society give the concept of public value management a more prescriptive edge as a university confronts the consequences of a transition towards a 'Mode 2' model of a university based upon a market-driven modality at a time when the very 'idea' of a university and the production and dissemination of knowledge are in flux.

Using material from discussion and debate at UCLan as to how to frame and implement a PVM approach in a university, we begin to realise the importance of the institutional arrangements beyond the formal boundaries of an organisation for the realisation of public value. Moreover, we see how a public value approach reveals the wider contribution an institution makes to society and looks at the institutional implications of working within a public value framework, especially in a regional context like UCLan.

Like most large organisations, UCLan is an important player in the regional policy community, and is embedded in a complex network of publics, policies and politics and as a regional university embedded in the knowledge economy in 'thick' networks of regional relationships. This connectivity and the reach these networks give the university through access to wider national and international networks give it a potential which it can bring to bear in its region.

Universities are seen as assets in the economic and social development of regions as anchor organisations with a central role in place making. Embedded in global knowledge economies and rooted in places and communities, they provide prestige to their locality and act as an engine for the acquisition and dissemination of knowledge resources to transform individuals, institutions, places, communities and regions into players in global networks. Regions are reassured by their possession of a university; regions that do not have one often feel disadvantaged and want one. In a regional sense, universities' contributions centre upon fixing the flows of knowledge, making places 'sticky' by positioning regions as nodes on global flows of intellectual, financial and human capital assets.

Though much of the literature on the regional role of universities centres on their economic impact the wider impact on the public sphere is often overlooked or under-appreciated. The outcomes and outputs of university research, teaching and knowledge transfer add value to the public sphere beyond the realms of scholarship and the economy. Put simply, universities can influence the lives of individuals in all walks of life as they go about their daily lives in their home regions through their contribution to the wider public sphere by training students in publicly valuable roles like nurses and accountants, through research that engages with socially relevant and pressing issues, and through knowledge transfer and innovation that applies the results of applied research into practice in policy and commerce. Though the public value contribution of a university lies in the public sphere, largely beyond its campus through its relations with the society within which its activities are embedded, the engine for this value lies within the university itself.

From a regional development standpoint, the role of a university is often equated with its contribution to the regional labour market and to the improvement of communities by improving educational attainment with the labour market and community levels being the most salient levels of analysis and with pressures to tailor curricula to the requirements of a specific labour market. Embedded in its locality a university creates a ‘learning environment,’ develops skills and builds resources for competitiveness and social cohesion. It impacts upon the knowledge economy and attracts organisations and families into a region, affecting the demand and supply sides of its local labour market, and contributes to the density of a region’s economic community of policy and practice.

Often, the concept of public value is seen as a new approach (Bryson et al 2014) with a focus upon the citizen and enhanced democracy through dialogue and deliberation in structures of collaborative governance and such an approach is consistent with a view of regional development. Seen in terms of a network in which universities can play an important part, as a set of institutions, organisations, funding structures and streams, structures within interactive networks engaging in collaboration, for the pursuit of common economic, social and cultural goals. In these networks, universities and higher education institutions (HEIs) are seen as ‘anchor institutions’ that are able to engage with a range of organisations at many levels. It may be that there is a wider network of professional practice involving teaching and research staff in universities and schools working together in wider, regional networks framed within new institutional structures engaged in new relationships at the institutional and individual levels.

For institutions like UCLan, embedded in a region in which it contributes significantly but to which there is little insight or appreciation of that contribution, a public value perspective is becoming critical, but as something that is adjunct to existing commercial practices in which it is embedded. To create a robust defence of their mandate and mission, universities, as public institutions, need to quantify their contribution to the common good, but they also need to relate commercially to their area to survive. However, in contrast to the economic and financial measures of performance, which are well-documented (see in the university’s annual reports and accounts), measures of a wider appreciation of their public value contribution are largely unknown, as are strategies to achieve it.

Today, measures beyond money, beyond research income and the education of students are being sought as universities seek to justify their existence and resourcing by proving that they make a difference to society. Regional universities are embedded in complex multi-sectoral networks in political and market economies at local, national and international levels and this, we shall argue, gives them a unique status and potential for public value. They are part of the extended local ‘state’ that makes contributions to the local polity (and nationally, too) though they aren’t really funded for this or appreciated as such. Currently, however, this marketisation and commercialisation is reflected externally in assessment and evaluation of the activities of the institution which is perhaps best exemplified by the Research Excellence Framework (REF) process, a neoliberal policy initiative with its origins stretching back to the Thatcher era.

Universities are, however, positioned to address key issues and create public value at regional, national and international levels from their location within complex and intertwined commercial and knowledge markets and in this regard it may be that a regional university is especially capable to this, grounded in regional innovation systems and networks. Speaking from a Russian perspective, Kharchenko et al argue that a regional university is…

"… a type of university that differs by its multifunctionality, focusing on the needs of the state and business, at the same time, in the development process it becomes a regional "service", providing a close link between training and research, training and production, training and cultural service" (2019 page 1231).

Things aren't too different in the UK, but from UCLan's experience we would add that the role of the university as an actor in the local public sphere and policy community is equally important as is its ability to work across levels within the global knowledge economy and as a nexus between global issues and pressures (like climate chance and Covid-19) and local responses *in situ*.

Though there is no detailed model of a public value strategy, an important framework for a public value management strategy does exist, that of Mark Moore (1995) and we have based our thinking upon this framework which was originally aimed at the public sector organisation as guidance for public sector managers. Just last year the author of the framework Professor Mark Moore (2019) acknowledged that public value is produced by all sectors and not just the public sector. Moore's framework provides the essential elements for any organisation that is looking to monitor and maximise its contribution to society and has application across all sectors focusing attention upon the strategic management process. Today, public value discourse is becoming much more widespread, in government and in industry – and in the university sector, too. For the university this perhaps reflects the hybrid nature of their structure as they straddle all sectors and, like all organisations, are vulnerable in times of crisis.

The Moore framework has three elements which, it is argued, must be aligned in order to achieve public value. The 'strategic triangle' (eg Moore 1995) focuses attention on the key management elements of a public value strategy as a 'tool' that support public managers in shaping, promoting and evaluating their strategies for the creation of public value from three perspectives, namely:

Firstly, it's substantive value to society, how much value is produced and how can more be produced. Thinking of value to society, one of the problems facing a public value strategy drawing on the Moore framework relates to the identification of value. Moore himself did not fully define this in an operational way. As Kelly et al argued, public preferences are at the 'heart of public value' (2002: 6), but their expression and aggregation remain problematic, especially as *“value does not exist in any concrete sense, and is open to multifarious interpretations in accordance with the particular political philosophy being espoused”* (Erridge, 2007: 1030). In this project we have defined the value components of public value drawing upon an approach used by Meynhardt (2009, 2012) –see chapters 2 and 3 drawing upon the leading approaches to human value measurement (eg Schwartz 2012; Inglehart 1990) to create an operational approach to appreciate the public value outcomes of an organisation.

Secondly, its sustainability politically, the legitimacy and support needed to and how to optimise them. To be workable and enduring any strategy must be considered legitimate and must find political support in the organisation’s authorising environment (Davis and West 2011). This environment consists primarily of those individuals and groups that are involved in formal decision-making structures (eg superiors, politicians, higher-level public administration, and the electorate) which directly control the flow of resources (authority and money) to the organisation.

Thirdly, its operational and administrative feasibility, in the sense that the organisation must have the operational and administrative means to implement it and the organisation must have the capacity and capability to deliver its publicly valuable objectives.

One of the defining features of a public value approach is its collaborative and dialogic nature. A public value orientation creates an imperative to engage and to think more widely beyond an organisation’s boundaries about its wider impact on society. Essentially, you don’t necessarily have to go to a university to benefit or derive value from it! Of special importance to a public value approach is dialogue with citizens within the public sphere, to recognise needs and values and to understand the impact of outputs as outcomes in the public sphere. Given that a public value evaluation essentially moves from individual citizens in the public, then a dialogue with the public is really an essential element of a public value management framework. Most organisations don’t actually do this and some we’ve collaborated with in this research project that have undertaken assessments have not realised the positive public value contribution they make – without any effort or expenditure they can appreciate and articulate their extant public value profile. It’s interesting to speculate how much greater their profiles would be if an approach informed by public value were able to communicate the public benefits of their outputs in the universal language of human values.

However, we have realised that one of the greatest barriers to the acceptance of a public value approach or framework in organisations is that they are so often involved in the pursuit of financial and market objectives, with hard outputs being seen as the expressions of their worth to ‘society’. This is especially true of universities in the face of the marketisation of student fees and performance management by league tables, often internationally. Even though now, more than ever before, there is a growing recognition that a wider appreciation of the public value of organisations is becoming an important currency in a complex political economy we are still in the grip of the practices and processes of the new public management paradigm.

In recent years, the marketisation of higher education has created a significant change in the funding of universities. Increasingly the university competes in markets for its income, from teaching, research and knowledge transfer, as well as from wealthy benefactors for some. Marginson (2011) notes the importance of public value to a university in respect of public funding and stakeholder relations in the public sector and comments also upon the increasing importance of public value in respect of its appeal to students – students want to learn about the wider value to society of their subjects and their own studies. There has been a movement away from state funding and a transition towards a more directive role for funding from the state associated, in the UK at least, by such new public management techniques as the Research Excellence Framework (REF) with its associated impact on management techniques inside institutions as more academics compete for income and in which research is commodified and 'Managerialised'.

The Covid-19 crisis reveals the risks associated with the pursuit of commercial income for teaching. Universities in countries including the UK have looked to global markets for income from international students, usually at much higher fee rates than for domestic students. In a global pandemic and the consequent recession, this exposes universities to enormous financial risk as the following passage from the BBC Education website (2020) noted:

It went on to say *"Well, you are all wrong, and need to do some more homework. The answer is – education. Many people probably don't even think of education as part of the economy. The groves of academe are surely above such sordid considerations as money and finance? Not a bit of it. Money is the lifeblood of education – endowments from wealthy alumni, catering and accommodation fees, conference facilities, and the biggest of the lot – attracting lots of fee-paying students every year. The trouble for the education sector is that it is uniquely vulnerable to the Coronavirus pandemic."*

But this is not to say that the principles of financial efficiency and economic performance should be disregarded or diminished in their importance. In a time of existential crisis and uncertainty associated with the Covid-19 virus pandemic and the consequent social and economic disruption, universities are increasingly looking for government support as commercial markets for students appear increasingly uncertain and there needs to be an assessment of value associated with public spending. And yet, questions are being asked about the value of a university to society and proof of the public value contribution any university makes may become fundamental as they seek to justify their existence and entitlement to public funding. A recent government policy document relating to the Establishment of a Higher Education Restructuring Regime in Response to Covid-19 is revealing of UK Government's policy priorities:

"We need a future HE sector which delivers the skills the country needs: universities should ensure courses are consistently high quality and focus more heavily upon subjects which deliver strong graduate employment outcomes in areas of economic and societal importance, such as STEM, nursing and teaching. Public funding for courses that do not deliver for students will be reassessed. Providers will need to examine whether they can enhance their regional focus. I want it to be the norm for far more universities to have

adopted a much more strongly applied mission, firmly embedded in the economic fabric of their local area" (DfE July 2020).

Following decades in which the new public management objective of *"Managing inputs and outputs in a way that ensures economy and responsiveness to consumers"* and in which the role of managers was *" to…define and meet agreed performance targets"* (Kelly and Muers 2002), there has been a turn to public value in which the public interest and common good enter the authorising environment of organisations though this does not mean that public value supplants the tenets and principles of new public management. Our own strategic thinking in UCLan suggests that here is scope for an accommodation of public value in an expanded view of efficiency and performance management (Broucker et al 2017).

Today, governments are beginning to focus upon wider than economic efficiencies in their evaluation of policies and the justification of spending, upon 'softer' outcomes rather than 'hard' outputs, but the measurement of these has often been lacking. After decades of policy shaped by neoliberal ideology under new public management regimes foregrounding financial targets and economic efficiency, there is an emerging public value management regime that is informed by strategic thinking which promulgates a wider and more inclusive view of value. This approach recognises the impact that organisations have in the wider public sphere, as well as the positive implications such a public value realisation can have on an organisation's mandate. This approach requires new modes and methods of strategic management in response, but it is beginning to have advocates in government. In March 2019 the UK Treasury published a public value framework in which a comment on the background on a turn to public value was revealed. It said:

"The challenges of assessing public sector productivity are well known. Whereas in the private sector, the output of services can be valued using their prices, the free-at-the-point-of-use or subsidised nature of public services prevents an equivalent method for valuing output". In the foreword, the Chief Secretary to the Treasury (Elizabeth Truss MP) stated that a public value approach: *"…offer(s) an important opportunity to think differently about performance and develop a greater understanding of the process of turning inputs into outcomes across public services"* (UK Treasury, 2019).

As discussed previously, public value provides a way to reflect and represent the wider value of something to the public sphere based upon an assessment grounded in human needs, motivations and values. It represents the humanisation and democratisation of public policy. Increasingly central to policy assessments by government, is an appreciation of government spending and a focus upon public value moves away from a policy environment that is driven solely by markets and money towards a more human perspective.

Public value management as a strategic approach is focused upon optimisation of the outcomes of policy and practice in the public sphere that is framed by human values (Bryson et al 2014). Giving a more rounded view of the contribution of an organisation to society, this approach gives an external assessment of its (often 'soft') outcomes rather than its (usually harder) outputs. To be effective, a public value assessment essentially starts with citizens and is fundamentally based upon their perception of the contribution of an organisation to the public domain as seen through the lens of their values.

In the UK, as in many other countries, universities, while often having an image as public organisations, are essentially becoming commercial organisations in an increasingly 'marketised' higher education economy. They sell goods of essentially individual value that bestow status, prestige and earning potential upon their customers (i.e. students) – these are essentially private values – and a university education thus provides benefits to individuals in respect of earnings and status enhancement that may be only indirectly a source of public value. What distinguishes a university from public and private sector organisations, though, is its unique position in the knowledge economy and it is in this arena where we start to get a picture of a university's special *public* value profile, one that distinguishes it from commercial teaching institutions and 'Higher Education Colleges'.

For private sector organisations things are a little different. Their legitimacy and their mandate essentially derive from stockholders, based almost entirely upon their successful trading activity which largely derives from selling things that people want to buy, and not from the public purse or public policy space. Fundamentally, private sector organisations have a stockholder strategic orientation and a focus on the financial bottom line and this logic has increasingly permeated the university sector through the norms and nature of new public management. Increasingly however, more private sector organisations are now seeing that a public value position gives them proof of their wider benefit and a 'license to operate' from the public domain which can be seen as a currency in regional and national political economies with positive implications for policy 'favours' and access to politicians. Moreover, in a risky world, public support and funding associated with a public value profile can give an organisation protection against the moral, legal and social vulnerabilities that are confronted by commercial organisations. It can also lead to market advantage adding lustre to products or services in the public sphere.

It is argued that in recent years the 'idea' of a university has changed (Gibb et al 2012). In many respects, it could be argued that there is little to distinguish a university from a commercial organisation selling services to students as customers and at the same time the public or civic elements of a university are being marginalised and neither are typically measured or managed. Some even go so far as to say in time the university as presently configured (and perceived) may go the way of the Tudor monasteries, as society comes to see them as just another commercial organisation that ultimately fails to justify government patronage (Marginson 2011). Meanwhile, a public value approach focuses on the unique nature of a university located within the knowledge economy.

Now, more than ever before, universities are seen as essential for finding solutions for big issues that confront society. Regarding grand challenges such as climate change, sustainable development and child poverty, universities are expected to undertake research and provide answers to these major problems. In the Covid-19 pandemic, for example UCLan, like many other universities, has been involved in a coordinated regional response with and within the UK National Health Service (NHS). Universities also operate in markets for students to prepare and equip them for careers in increasingly competitive and dynamic labour markets.

A 2013 report by the UK Department for Business, Innovation and Skills (BIS) provides details of research regarding the benefits of higher education participation for the individual and for society and reveals the significant individual and societal level benefits that flow from this. The benefits were diverse, including greater social cohesion, trust and tolerance, increased social capital, greater civic engagement, longer life expectancy, better health and improved educational parenting for the next generation. Higher education confers both private and public benefits (IHEP, 2005 for review). Private economic paybacks are the most evident, including higher salaries, better working conditions and increased employability (OECD, 2012a). Non-economic private benefits are just as important, for example regarding increased health, engagement in society, and life expectancy, while decreasing chances of being a victim of crime or of being incarcerated (McMahon, 2009) in Cremonini 2014).

Figure 12.1: The array of potential Higher Education benefits (Adapted from IHEP 2005 cited in Cremonini et al 2014)

The Array of Higher Education Benefits	**Public**	**Private**
Economic	Increased tax revenues Greater productivity Increased consumption Increased workforce flexibility Decreased reliance on state support More research and innovation	Higher salaries and benefits Employment Higher savings levels Improved working conditions Personal and professional mobility Status and reputation resulting from research outputs Financial benefits resulting from research outputs
Social	Reduced crime rates Increased charitable giving/community service Increased quality of civic life Social cohesion/appreciation of diversity Improved ability to adapt to and use technology	Improved health and life expectancy Improved quality of life of offspring Better consumer decision making Increased personal status More hobbies and leisure activities

From a value standpoint, universities are, it may be argued, hybrids, with value outcomes generated in both the public and private spheres. Drawing upon a new public management paradigm, Cremonini et al (2014) used a benefits approach to operationalise a process of assessing the effectiveness of turning government funding into outputs or benefits. The above table from IHEP (2005) cited in Cremonini et al 2014summarises the comprehensive totality of HE's most important private and public benefits. Policy efficiency being defined in respect of the realisation of these benefits.

More recently, examining this from a student standpoint, a recent poll for Universities UK (ComRes 2019) found that 8 out of 10 students agreed that government should do more to promote the broader benefits of university study irrespective of salary. Clearly, students are looking for a wider than financial benefit AND are reaching for human value contributions which can be seen as central to public value and for understanding the wider connections between their studies, subject and society.

Paradoxically, at a time when universities are most needed, the value of universities to society and of a university education to students is now under scrutiny. As university funding becomes more competitive and increasingly subject to wider perceptions of value, universities need to show and share the values they produce in society, and are increasingly called upon to justify their existence and funding in a time of fiscal crisis and, in the case of the UK, as we leave the EU. It is argued that:

> *"…[d]oing just more of the same is no longer a viable option for most public colleges and universities: they need to reimagine and creatively rethink about their place in society to show their value to the public" (Trepanier 2018 page 126).*

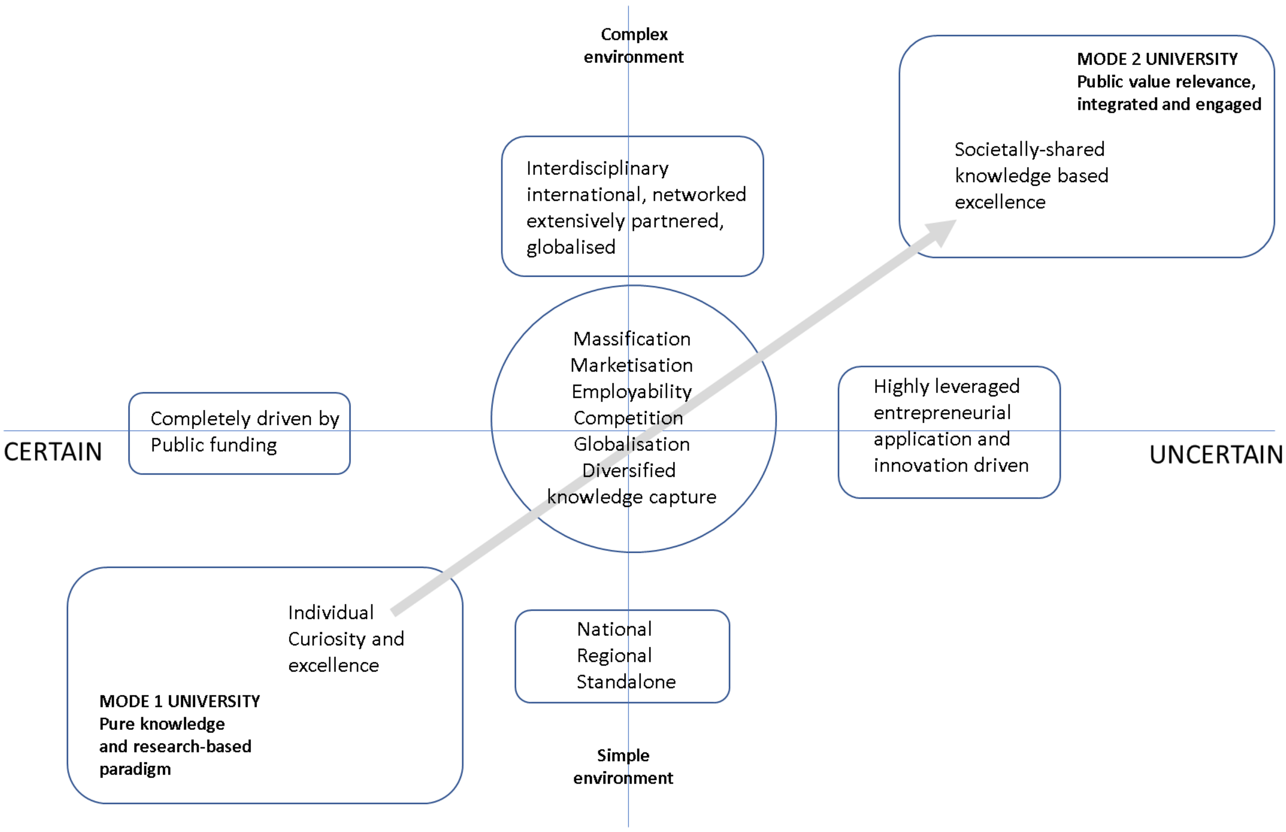
There is in fact an overwhelming sense of the higher education sector in the UK and globally being at a point of profound change (Watermeyer and Olssen 2020). This is perhaps even more so in the aftermath of the Covid-19 global pandemic, where universities are in the grip of an uncertain future in respect of student numbers resulting in a loss of income and of measures being put in place to ensure the safety of students and staff that only adds to the cost of delivery.

In a world where institutional and sectoral boundaries are becoming challenged and organisational boundaries blurred and more permeable, new forms of institutional design are emerging with networked forms of governance, in which individual citizens are playing an increasingly important role. Today, universities are uniquely located at the crossroads of many agendas and interests and, operate within global knowledge economies and are well-placed to respond to and to address the big issues confronting society through innovation in teaching, research and knowledge transfer activities.

Moreover, in their localities, universities contribute to the physicality of the place through real-estate investments (for example the UCLan Masterplan), which shapes the fabric of cities and towns in ways that impact upon the place experience of wider populations in ways that are captured by a public value approach that further illuminates value beyond economics alone. A public value approach recognises these various agendas and gives an appreciation of universities' contribution beyond financial efficiency and commerce, recognising the full measure of the human experience and how a university in all its diversity can contribute to this. However, as we develop an implementation of public value at an institutional level, it is clear that a public value perspective on value is important but does not provide a complete picture of the administrative context.

Today, in what has been termed a 'mode 2 university' universities have diverse funding bases. They exist as 'open' organisations that interact commercially and intellectually with a range of influential stakeholders who bestow resources and legitimisation that give it a broader resource base and relevance to the public value agenda (Gibb et al 2012). The changing dynamic environment of HE institutions and their evolution from pure knowledge to public value priorities (Doutriaux and Barker 1996; Kohler and Huber 2006; Wisseman 2008) is represented in the rendering below.

Figure 12.2: The changing university paradigm (after Gibb et al 2012)



The diagram renders a perspective of the evolving nature of the task environment facing universities on a simple/complex and certain/uncertain axis. It highlights the way that the notion of 'excellence' might be changing from pure knowledge to public value via the key issues in HE today including globalisation, marketisation and massification (Corbett 2006; Deem and Lucasa 2008; Huisman 2008; Wissema 2008). It shows the transition to a new 'modality' of a university in today's complex and uncertain environment in which socially shared knowledge forms a basis for excellence and the evaluation of performance rather than pure knowledge and research.

For universities as publicly engaged institutions, a wider perspective on the university in respect of its perceived value is necessary to appreciate the contribution they make to society, but this does not supplant an economic view of efficiency and 'value'. The marketisation and massification of university provision has in recent years changed the nature of the university in respect of its priorities, processes and expectations and has led to a principal focus upon consumers, market performance and economic efficiency. For a business-orientated university market performance is vital, but today, a wider appreciation of value is required and here a public value approach has an important role. It has been argued that this increasing focus upon the performance measures and the commercialisation of the university may be an inappropriate basis for the justification of public funding for supporting what is becoming, essentially, a commercial organisation. Watermeyer and Olsson concluded a recent investigation by saying…

"…while certain supply-side techniques of governance may in certain senses assist in ensuring both efficiency and accountability, a reinstatement of the ideal of the public good is both possible and necessary to permit a re-professionalization of academics as custodians of an autonomous independent tradition of knowledge production, necessary in an ultimate sense to underwrite the democratic integrity of the university…" (2020).

Consistent with the idea of the 'mode two' university as a forum for the creation of public value, a public value approach to universities places the academic within collaborative (often) regionally based networks between the acquisition and dissemination of knowledge, values and value. It is through scholarship that public value is realised, but this is not the world of curiosity and research driven by the pursuit of pure knowledge.

In the current resourcing environment, university funding is drawn from a diverse range of sources so universities must engage in high levels of interaction with a range of stakeholders to secure funds. These include research grants, student fees and wider funding support. For today's university, sustainability is increasingly a function of a broader legitimisation as seen through the eyes of the state, private partners and, indeed, society as a whole (Gibbons et al 1994; Dooley and Kirk 2007; Rinne and Koivula 2009).

To address this, universities need to transition towards becoming more open and inclusive organisations (Nowotny and Scott and Gibbons 2001) where the old paradigm of scientific discovery ('mode 1') – characterised by the hegemony of theoretical and experimental science by an internally-driven taxonomy of disciplines and by autonomous scientists, which has now been superseded by a new paradigm of knowledge production ('mode 2'), where socially distributed, application-oriented, trans-disciplinary knowledge and innovation and subject multiple accountabilities are the norm (Nowotny et al 2003). In this new model university paradigm, public value may be seen as an important element of both research design and strategic management.

In these new settings of applied scholarship, knowledge is generated in the expectation and objective of its wider application in the public sphere. This is a radically different approach from the 'discovery science' of the earlier model. In the new model, knowledge is transferred between a range of sites including, the workplace, the neighbourhood and the home, and is facilitated by the university and its researchers 'on the ground'. Here there is a greater and more obvious link between the outputs of a university and the outcomes in the public sphere. Mode 2 knowledge is very much focused on the public and on the realisation of human values, and lends itself to a public value application and evaluation especially with its production within a reflexive process, within an ongoing dialogue between researchers and research subjects and in the application of research outputs (Nowotny et al 2003). A key element of a 'Public value university' will be this engagement with a wide range of actors (and funders) in complex, polycentric institutional arrangements in which public, private and social sectors – and citizens – are engaged in the design, delivery and even decisional processes associated with research and innovation. Here the role of the academic embedded and engaged in 'real world' issues will become even more important as the Research Excellence Framework process, with its focus upon impact, begins to address.

The values 'environment' of a university, and the policy and market spaces it competes in, are nothing if not complex. This breadth of interests and issues associated with a university represents a significant challenge to positioning the university and in appreciating and articulating its wider contribution to society. Here, a public value standpoint is useful as it can give a framework for an organisation to appreciate its value contribution in all its complexity using human values as a lexicon for a wider value narrative for a university within complex authorising environments and commercial markets.

Using an Ostromian terminology (Ostrom 2010) we envisage actors engaging in diverse, nested sets of action situations addressing complex issues in hybrid, multi-sectoral polycentric networks of actors in which the new 'language' of public value will plan an increasingly important role. For a regional university like UCLan, this contact is crucial in providing links with regional innovation systems which may be seen within these nested set of interactions as an action situation that engages a range of actors from all sectors, and from society as well. Here the commonality of a public value lexicon – and its inclusivity – may be a significant regional asset one in which a university helps realise.

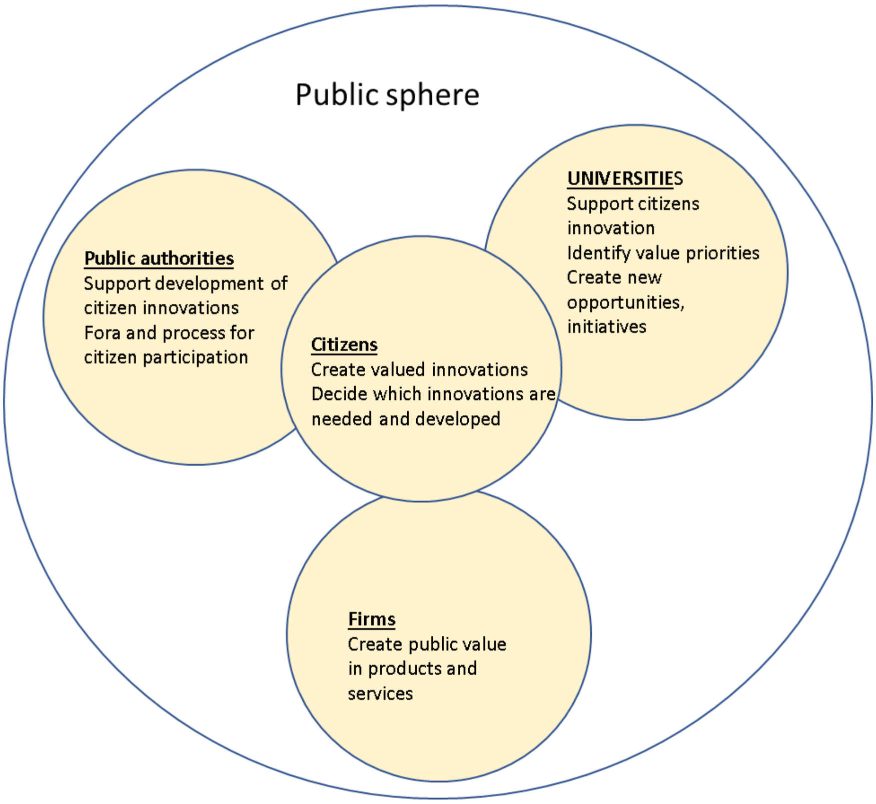
In what has been termed the movement towards a 'Triple Helix 'model of partnership involving government, industry, and higher education (Etzkowitz and Leydesdorff 2000; Leydesdorff and Etzkowitz 2003; Thorn and Soo 2006; Etzkowitz 2008) and as a 'Quadruple' model with the inclusion of civic society (Carayannis and Campbell 2012; Gibb et al 2012), it has been proposed that the three major parties in innovation are industry (wealth generation), universities (novelty production) and public control (government). In this context it is suggested that this new environment for innovation is characterized by a key role for universities with their active engagement at all levels of government in formulating policies in collaboration with strategic alliances of firms in developing and marketing products and for product and process innovation within industry and the services (Etzkowitz 1998).

More importantly, according to Yawson (2009), the 'Triple Helix' of state, university and industry is missing an essential fourth helix, given the absence of the public from the model. Advances in research and its application across all fields may be jeopardised by the virtual absence of this fourth, public, helix. Today, academic disciplines may no longer be dominant in the structures for creating and organising knowledge as knowledge creation is now the purview of polycentric networks which, trans-disciplinary, reflexive and hybrids of different sectors and scales, foreground the public sphere and its 'real-world' use and wider public value. In these new structures, the inclusion of the fourth helix, the citizen and society, becomes critical as scientific knowledge is increasingly evaluated in respect of its social robustness and inclusivity and here an Ostromian framework gives actors a structural and process perspective to optimise this engagement.

Today, public involvement and their values are now vital and should be commonplace in research in universities. This fourth helix gives a public perspective in regional innovation systems that highlights new discoveries and innovations that improve social welfare, eg eco-innovation and that helps to create linkages between science, scientists and education strategies. The quadruple helix (4H) model (Carayannis and Campbell 2009) expressly recognises the role civil society plays in innovation and in the development and application of knowledge. In this citizen-centred version of the 4H approach, the role of the citizenry is included as the 4th 'Helix' of interactions.

The following diagram adapted from Arnki et al (2010) shows the central position of the citizenry or, from a public value standpoint, the public, in the innovation process within an overarching development and co-operation platform in the public sphere. From an Ostromian standpoint one could envisage these circles as a set of related, nested action situations in which evaluative criteria are set as innovations relevant to citizens which encompasses commercial markets – goods and services they will purchase and from which they will derive value.

Figure 12.3: The university in the four helix model of innovation (After Arnikil et al 2010)



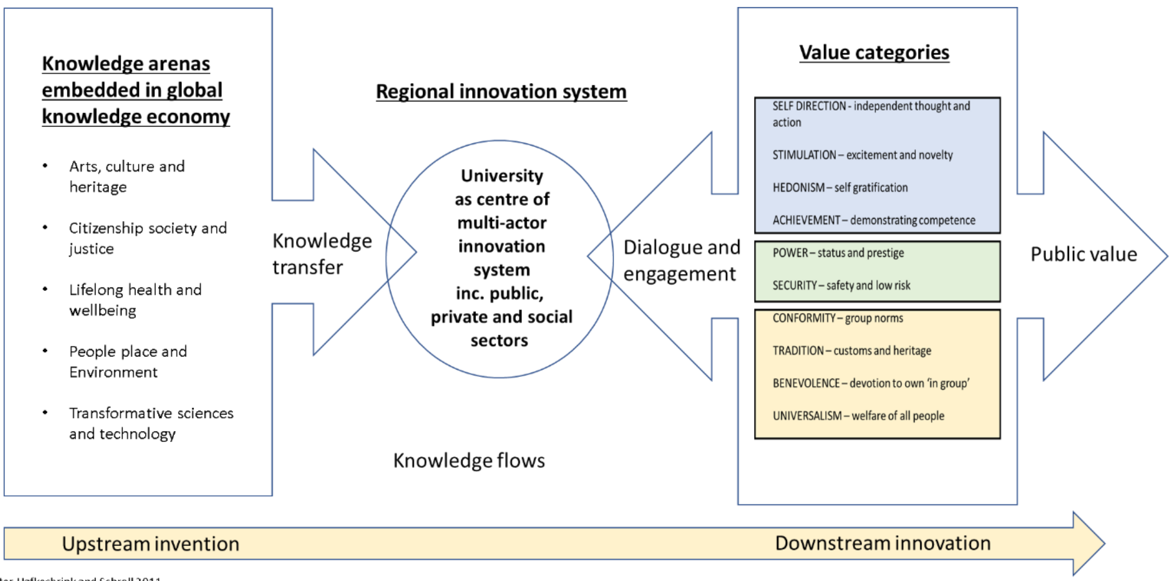
From a public value standpoint, the '4H' model gives a graphic view of how a university and its researchers collaborate with civil society, industry and government to provide innovations of value in the public sphere. From the evidence of the study reported by Arnikil et al the public in a '4H' framework derive value by their engagement *"as active citizens who* *try to have an effect on the decision making done in the private and public sectors and concerning them"* (2010 page 21).

From a regional development standpoint, the 4H model represents a significant turn towards a public value approach in which the public are engaged in what might be termed regional-global innovation mediated by the university and by embedded academic practitioners. Centred around a university (and its international and national collaborators), a key objective in this applied research is to achieve outcomes that are relevant to the public sphere, or in other words, to the creation of public value. For society, this empowers citizens in decision-making about developments which may change lives and opportunities and through which basic needs and higher motivations may be realised.

For a regional university like UCLan, a 4H model gives an inclusive foundation to building a strategy through which the public are engaged, and a public value perspective comes to be recognised and realised in its research design. Moreover, the university's ability to create networks of collaborators across research subjects, disciplines and themes (and scales) in concert with a citizens' perspective and the engagement of society (and its values) is a resource for being innovative within and across disciplines in interdisciplinary research programmes – it has academic as well as actual 'real-world' value.

The following diagram attempts to show this relationship from a multidisciplinary approach based around a regional innovation system that prioritises public value across all knowledge arenas.

Figure 12.4: Showing a university at the heart of a regional innovation system embedded in the global knowledge economy, engaging with the public and generating public value through the knowledge transfer process.



After Hafkesbrink and Schroll 2011

Essentially, this diagram shows how a university brings knowledge to bear into the regional innovation system from its position in the global knowledge economy through the individual endeavours of academic staff. At UCLan, our research is arranged into five groups in which the knowledge transfer process engages with the local innovation system. A key element of this research activity as part of a public value strategy is dialogue and engagement with the public and we have included the Schwartz ten categories representing the categories of public value. Through dialogue and engagement with the public we can see how public value can be identified and ultimately the university and its collaborators in the regional innovation system recognise and realise public value in a process of dialogue with the public.

This rendering (based upon Hafkesbrink and Schroll 2011) centres on the strategic position of a university in a regional innovation setting. Consistent with the new university paradigm presented earlier (following Gibb et al 2012) we see the university positioned as a nexus between the knowledge arenas of contemporary science, commerce and wider disciplines and the value priorities of the public sphere – the foundation of a public value framework. Such a framework provides an approach to describe knowledge flows in regional innovation systems from the developments upstream in a university (based in the above diagram on UCLan's own strategic research areas) to the realisation of hard outputs and soft public value outcomes 'downstream'.

Public-focused and facing, this approach, grounded in public value and engaged with the public sphere, could provide innovation in both product design and delivery and service design and delivery. Major contributors to regional policy which, through the lens of public value, would embrace the entire gamut of human values, motivations and needs. From a management standpoint we can envisage a role for a university as an actor in these action situations and with individual academics bringing their subject knowledge and expertise to bear upon issues in the public sphere.

Using Ostromian terminology, one can envisage these innovation networks as 'action situations' in which collaborations may be understood here as 'locally distinctive rules-in-use' (Ostrom, 1999 cited in Lowndes et al 2006) tailored to regional societies and settings. These rules, which frame interactions among social actors, encompassing both formal arrangements and informal conventions, norms and practices and this fluidity is consistent with the core public value management tenet of co=production envisaging that *"[c]itizens are also designers of public enterprise and constitutive of the institutions of public service delivery"* (Williams and Shearer, 2011: 13).

From this perspective, the role of the university as an institution that is embedded in both the knowledge economy and in society becomes more evident with space for dedicated institutional arrangements foregrounding the role of knowledge transfer initiatives within which the public are engaged at various levels. Centring a university strategy around public value gives an evaluative tool for appraising and evaluating the wider (than economic and commercial) value of research activity and the university itself to society.

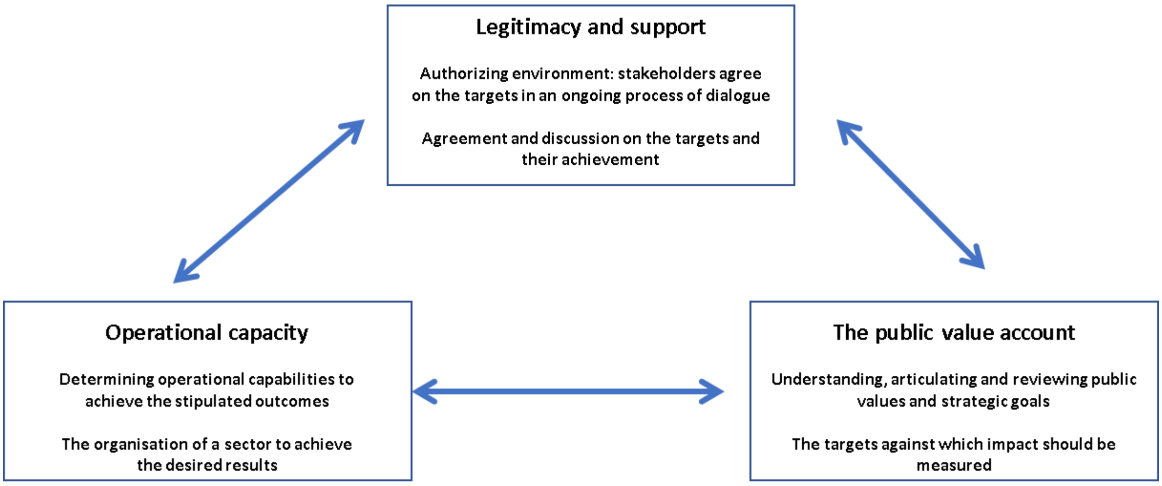
Clearly, universities contribute to policy initiatives, service delivery and the private sector in a way which extends beyond financial efficiency and economic value, extending to the entire gamut of human needs and motivations and it is clear that a university provides more than financial value in the public sphere. As Broucker et al (2017) argue, discussions of the value of education cannot be completely dominated by the efficiency debate. Public value would urge managers to not only focus on performance, but also on *"…steering networks of providers in the quest for public value creation…",* thereby "…*creating trust and responding to the preferences of the public as consumers, citizens and service users*" (O'Flynn, 2007 page 360).

Public value highlights the wider benefits a university can provide that go beyond monetary benefits and focuses upon wider than commercial perspectives. But a university is embedded in commercial networks and in markets and both public value and efficiency perspectives must be accommodated within a university's strategies. As we have suggested, the university is at a crossroads, between the new public management reforms of higher education that are associated with marketisation and student funding that envisages students as consumers and with arms-length performance measures such as the Teaching Quality Assessment (TQA) system and REF with rankings and ratings locating universities on a comparative performance scale. And yet, it is also argued that citizens want a highly performing HE system that is efficient in achieving the desired outcomes, operating justly and fairly and for the overall benefit of society (Bryson, Crosby and Bloomberg, 2014).

It is not suggested that public value management is seen as an alternative 'paradigm' to new public management as a mode or model for the environment within which a university operates in a policy context and to which it must respond and work within to survive and thrive. Rather, we suggest that public value management be seen as an adjunct to the efficiency and top-down orientation of new public management with efficiency criteria and rules in use being set nationally within a new public management framework.

Below, we suggest a modification of the Moore framework based upon Broucker et al (2017) which incorporates elements from a new public management paradigm within its framework.

Figure 12.5: Public value management after Moore in the context of new public management



Thinking about the value of a university using the Moore framework and, drawing upon Broucker et al (2017)'s summary measures from the prevailing new public management paradigm, gives more detail in respect of dialogue, targets and capabilities in each of the three elements of Moore's framework.

Firstly, the authorising environment: in which stakeholders agree on the targets in an ongoing process of dialogue, on targets and their achievement:

- New public management that is internally focused on target stipulation and the role of HE in society;
- Public value invests in intensive internal and external dialogue with societal, political, economic and other actors regarding the role of HE in society and the targets to achieve.

Secondly, understanding, articulating and reviewing public values and strategic goals, and the targets against which impact should be measured:

- New public management focuses on strategic goals that can be measured, specifically in terms of efficiency and performance (eg number of graduates; citations; number of scholarships etc);
- Public value includes a large number of non-economic targets (eg impact on unemployment reduction; creating learning opportunities for less advantaged classes etc).

Thirdly, determining (and organising) operational capabilities to achieve the stipulated outcomes:

- New public management focuses on efficiency and effectiveness (eg determining levels of success; funding rules; quality control);

- Public value focuses on other benefits and determines the opportunity of costs (eg by investing in learning for certain groups; broadening indicators with qualitative information).

Instead of a pure focus on the public value set envisaged by Moore, almost as an alternative to new public management, a wider approach that synthesises both (after Broucker et al 2017) gives a wider view of the value of a university to society that accommodates both economic efficiency and public value criteria. From an operational standpoint a public value approach allows us to appreciate the wider effectiveness of a university in respect of its societal impact.

Towards a public value university

So where is the public value in a university? A public value perspective gives a view of the impact of an organisation beyond its physical and financial boundaries and beyond the detail and scope of its business plan. Public value requires us to take a wider view of outcomes rather than an obsession with outputs. Working with public value to create a public value university (as for any organisation) does not require one to do anything fundamentally different, other than to recognise what they already achieve as perceived by the public. In this regard, the public value measurement approach developed in Chapters 2 and 3 can give an important start to appreciating and assessing the value of a university seen from the standpoint of society.

In this chapter which is based upon the preliminary steps of the University of Central Lancashire to work with public value, we have focused on the relationship between a university and its region – especially in its relationship with the knowledge economy. There are many other elements of university with potential for public value production especially those associated with the university's student cohort trained to deliver services of value to society (in business, engineering, health and medicine) and the university's physical estate in providing valued outcomes – all of these have a public value potential. In this chapter we've focused upon the university's role in a regional innovation system and the centrality of the relationship between the public and academics in the institution seen as 'entrepreneurs' in a public value 'innovation dynamic' in which valued outcomes accrue to region from academic endeavours and innovation. This take on public value is consistent with the idea of a 'Mode 2' university that is close to government and to the market and that is engaged with and responsive to the needs of the public sphere.

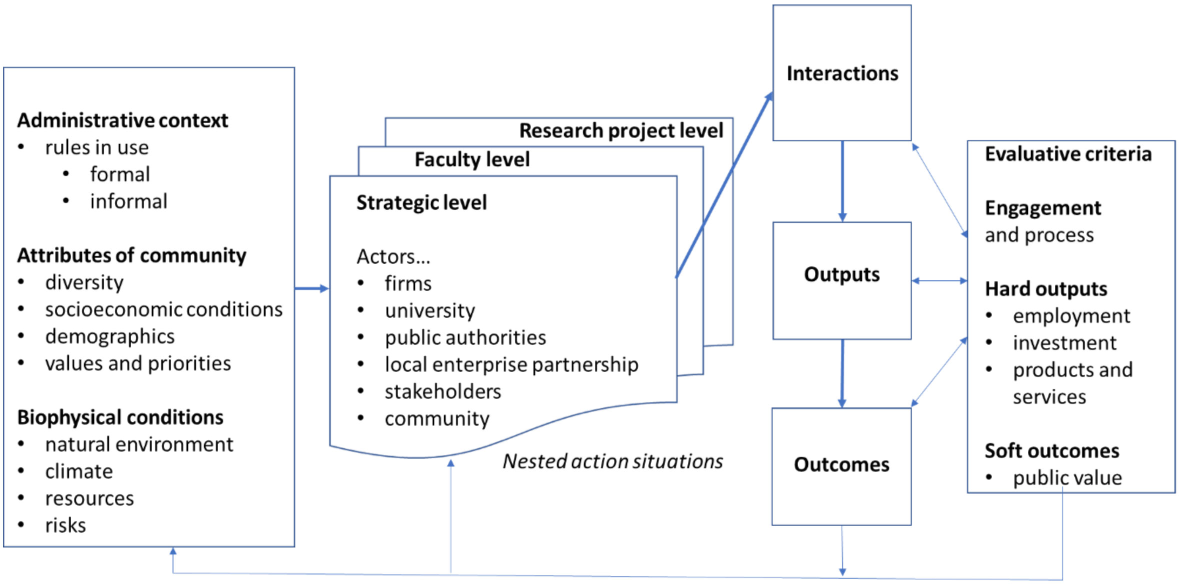
In todays' increasingly challenging market for higher education services, there are important reasons in both commercial and policy domains why universities need to take a wider view of their outputs and outcomes to appreciate and articulate their public value potential and contribution to society.

In making a case to government for greater support for universities recently, the lobbying group 'Million Plus' articulated a university's role in making a wider contribution to society and in achieving more than their principally educational mandates to contribute to the common good. In its public facing role as well as its market relationships, public value is becoming an increasingly important element of a university's repertoire, and a public value management framework can provide a wider view of the value of a university to society.

Many higher education reforms in recent decades have been based upon the paradigm of new public management with its focus on competition and efficiency. Consequently, today's marketised university sector and policy and resourcing environments are dominated by financial efficiencies and on underpinning measures and metrics which do not give an appreciation of the true value of a university to society and its regional setting. In regional settings, universities are anchor institutions giving a sense of permanence, continuity and place in policy and public realms that is locally highly valued. They also have an enabling role in the realisation of the value of the global knowledge economy in which they are embedded. A public value approach promises to give a wider picture of the value of a university to society as perceived by individual citizens living their daily lives. However, this is not to say that the new public management paradigm is inappropriate or irrelevant. Rather, we suggest an approach in which public value provides an added dimension to an appreciation of the efficiency and performance of a university which takes into account its wider contribution to the public sphere as assessed in terms of its contribution to the needs and motivations of ordinary citizens based upon the perceptions of citizens and their perceptions if its impact upon the things they need and which motivate them as they go about their daily lives.

The following diagram gives a rendering of a strategic public value management approach for a university at strategic, faculty and project levels for the implementation of a four-helix approach to innovation. Focusing upon strategic, faculty and research project levels of analysis, the model is based upon The Institutional analysis and Development framework and takes into account the factors bearing upon the institution, the interactions in complex networks of policy and practice, and how various evaluative criteria can be brought to bear upon the process of interaction, the hard outputs as well as the soft outcomes and the public value of an institution's performance in this area. As a framework for strategy we suggest that, drawing upon the IAD framework, public value can be seen as both a rule for shaping interactions in action situations as well as a criteria for evaluation alongside harder outputs associated with the results of interactions within the action situation.

Figure 12.6: Towards a public value university. Model based upon the Institutional Analysis and Development Framework.



The rendering above is based upon Ostrom's IAD (Ostrom 2012). Consistent with the IAD framework it locates research involving strategic level collaborations with staff and stakeholders in the context of social, administrative and biophysical settings. Focused specifically upon research projects engaging in innovation and enterprise (though we suggest that the framework approach here is generalisable beyond this aspect of a university) in the context of a regional innovation system, it gives an insight into how a public value approach based upon the concept of nested sets of action situations could give a conceptual foundation to a university strategy. By accommodating the multiple levels of activity and decision-making within an organisation as nested sets of action situations we can envisage how wider external, precedent issues bear upon the research and innovation process at strategic, faculty and project levels and see how evaluative criteria set and rules in use shape and monitor the nested action situations encompassing the value potential of the research process and interactions as well as outcomes and public value outcomes.

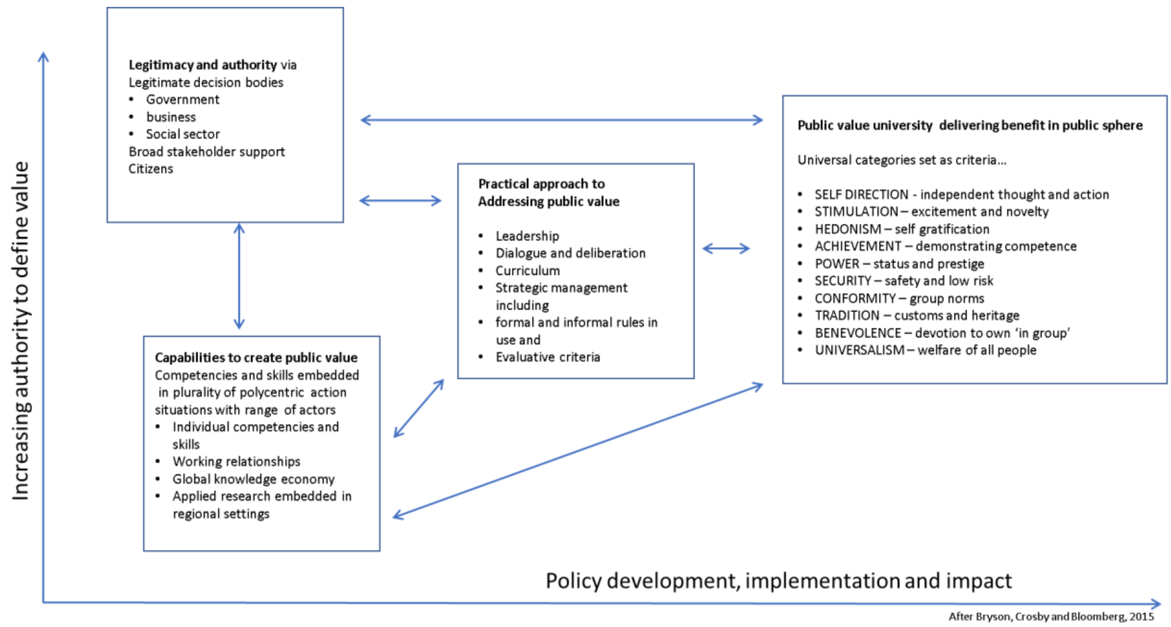
The realisation of wider value in this way broadens the appreciation of the impact of a university in society. Beyond a model of consumers and clients, the public value approach opens out the wider public sphere as the domain in which a university may have an impact and within which the outcomes of its activities can achieve public value. In concert with other regional actors, this can significantly leverage local initiatives through innovation by drawing upon the ability and agility of the university and its access to the global knowledge economy.

A public value evaluation of the work of a university and its contribution to the public sphere in a regional setting gives a new perspective on the key role of a university in regional innovation networks and the knowledge economy that highlights the importance of its being dually embedded in regional networks and in the global knowledge economy. It is from this unique location that the university derives its fundamental public value potential by engaging actors in co-production and collaborative processes, and by connecting the regional agenda with the global knowledge economy and with innovations developed by the university across a range of disciplines and research groups and across which public value can provide a wider narrative and unifying goal.

In a world of diversity and division, the universal nature of the human value set upon which the public value approach that we have articulated is based is especially valuable in the appreciation and articulation of a university's role in society. Working within global knowledge networks and making a significant public value contribution to society beyond the hard outcomes of a commercialised higher education sector associated with the delivery of products, services, employment and investment, regional universities can add value to the public sphere through the creation of socially relevant outcomes associated with its activities which have an impact far beyond that envisaged in business plans and through market relationships.

The following diagram is a modification and expansion of Moore's strategic triangle, after Bryson et al (2015). In this a core element at the centre of the model accommodates insights from Ostrom's IAD framework to suggest elements of a practical approach to achieving public value in a university based upon UCLan's own thinking about public value management in a university setting. Unpacking Moore's framework we see value achieved on the right-hand side of the model expresses as contributions in the Schwartz value categories. On the top left-hand side of the model the contribution of the public value management process of achieving legitimacy and authority in order that the public value process may be empowered and energised in an organisation. At the bottom left of the model we see the importance of relationships within polycentric networks (which may be perceived as Ostromian action situations) with which an organisation (in this case a university) must collaborate to achieve capacity and resources to address complex issues. This element of the expanded Moore framework highlights the multiple levels at which a university works, from the applied research level drawing upon the skills of individual scholars, to engagement in the global knowledge economy in which universities are uniquely positioned and from which they derive much of their public value potential.

Figure 12.7: An adaption of the Moore strategic triangle after Bryson et al (2015) incorporating elements of the IAD Framework (after Ostrom 2010, 2011) – applied to a university



A public value approach requires us to take a wider view of the activities, impact and outcomes of a university beyond an emphasis on the provision of private value associated with commerce, employment and income, and an evaluation of performance based upon efficiency and economics. By re-envisaging universities as public value institutions operating within diverse, polycentric networks embedded in global knowledge networks and society – especially at the regional level – to achieving value reveals the impact of the university upon society both directly and through inculcating an awareness of public value among staff, students and stakeholders. Such an approach also reveals the impact of society and the public sphere upon the university itself and its operations through the potential of consultative, collaborative structures. Perhaps the key to this is in the embedded nature of a university and its scholars working beyond the ivory tower to recognise, respect and respond to the pressing problems confronting the public sphere.

13. Public value management: Towards a paradigm for practice

Rick Wylie

When we began this book, we set out to address a problem – how to achieve public value in projects and policies. To realise this, we had to understand what public value actually is in order that it can be identified. We began by unpacking the concept of public value and how it may be understood and measured using a technique which gives managers a robust, repeatable and reliable approach to measure it. This technique – a synthesis of models, theories and frameworks – is based upon the work of leading scholars in the fields of public value and human values. We then used this technique working with collaborating organisations to assess their public value profiles and contribution to the public sphere as perceived by citizens. This collaboration gave these organisations a new view of themselves, a fresh perspective on their relationship with society – they had never seen themselves in this way, or fully appreciated their wider value to society.

In this book we have discussed an emerging 'turn' to public value in policy and practice and how organisations – especially those in the public sector or using public funding – increasingly need to justify their actions – are they doing the right things. To achieve this we developed a portable, scalable approach to help an organisation work within a public value framework to assess and articulate their public value contribution to the public sphere, to the daily lives of ordinary citizens. By assessing the wider contribution of an organisation to society we begin to appreciate the softer, human, outcomes of their activity beyond its harder outputs and beyond the relationships cast in terms of customers, consumers or service users.

It is widely recognised that the delivery of public services in the 21st Century is increasingly dominated by diversity of issues, actors and values. What is clearly needed is a politics and administration of acceptance and accommodation between individuals, institutions and interests. Today, problems and issues unprecedented in their complexity and spatial and temporal scale like climate change and Covid-19 confront societies. Emphasising the globalised world-system we inhabit these problems shape the organisational environment and relationships with citizens and stakeholders. These interconnected ecological and social systems exist simultaneously at multiple levels and in all localities. Exacerbating these problems, today's world is also beset by deepening inequality; a hollowed, thinned state; "downsized" citizenship, fake news, diversity and social exclusion are all creating an imperative for a new policy model which involves citizen and stakeholder engagement. Such a model foregrounding public values more centrally engages citizens as co-producers in policy design and delivery in an environment of inclusivity and participation.

As a mode of policy making, a public value approach embraces more than just the public sector, it includes private and social sectors and citizens who are envisaged as more than merely voters, consumers and service users making them more central as problem solvers and co producers within policy structures with such participation being a valued outcome. But public value is not just the province of the public sector and as we've seen from our case studies a public value approach extends to all sectors reflecting the multi-sectoral nature of complex policy environments and the interpenetration of sectors at various scales.

In this book we have ultimately bridged the gap between the subjectivity and psychological level of public value and human values and the social, societal and political level of policy structures in public value management. Later in this chapter we propose the outline of a framework for public value management drawing upon Ostromian frameworks (2010, 2011) in which a public value perspective helps addresses the key problem of value heterogeneity at the individual level and the polycentric reality of contemporary governance architectures. In emerging new public value policy structures we see how the dynamics of diversity are actually creating opportunities for the realisation of a public value governance paradigm at the system level in which a wide range of actors, citizens and stakeholders are empowered and engaged in policy design and delivery – this itself creates value in the public sphere.

In case studies in the tourism, space, higher education and energy sectors, we have seen how organisations and funders are now (albeit sometimes slowly) moving beyond a purely financial value perspective. Increasingly, they are using value beyond efficiency and effectiveness to justify their activities and position their missions in increasingly competitive authorising environments. Public value is becoming important to society and also to organisations who need to appreciate and articulate their wider contribution to the public sphere and their broader relationship with society. As organisations are required to work beyond their nominal boundaries and missions, to achieve their goals and prove their worth, public value is becoming a currency in complex political economies and resource environments within which public funding, and contracts, are allocated.

With increasing issue complexity and the fragmentation of organisations, functions and jurisdictions a polycentric policy environment has been created in which multiple actors with relatively limited capabilities and authority collaborate in hybrid institutional forms work across sectors, scales and spaces. A public value management approach is a response to the challenges of a polycentric, networked, hybrid policy environment and to the limitations of previous public administration approaches such as 'new public management' based upon financial efficiency with citizens perceived as consumers, isolated from the policy process. In the emerging public value paradigm values beyond economic efficiency and financial effectiveness are becoming more prominent as organisations in all sectors become engaged in a double dialogue, firstly with the public and secondly within their authorising environment with their paymasters in a competitive 'multiverse' of competing claims in which value to society is becoming an increasingly important factor in the allocation of public funding and the maintenance of mandates.

For organisations and managers a public value perspective extends their imaginations beyond the boundaries of their organisations, into the realm of collaboration and the co-production of policy solutions often in collaborations across sectors and engaging with local communities and service users around the design and delivery of public services as a 'new localism' as organisations focus upon the soft wiring of solutions engaging society and upon outcomes rather than hard outputs. The Covid-19 pandemic gives an example of the importance of localised solutions and the role of citizens as co-producers of policy and its implementation.

This new approach to public administration is based upon public value, specifically upon the provision of states of affairs consistent with the value aspirations of salient publics who perceive that they derive value in their daily lives. This fundamentally human-centred perspective is grounded in the universal human value set with its foundation in human needs and motivations. Working in this public value environment requires dialogue and co-operation with the public and citizens and collaboration between organisations rather than silo thinking and top-down control. Critical to the idea of public value is consultation as "…the proper arbiter of public value is society" (Benington and Moore, 2011). In this new model the public comes to be identified as an actor within the governance architecture moreover, it is not given a priori it emerges and reflects the diversity and dynamism of policy networks and issue publics.

For the organisation working with public value this means appreciating and articulating the value of the outcomes of an organisation, or the outputs of a policy from the standpoint of society as perceived by citizens in respect of the impact it has upon their daily lives. In chapter two we argued that a public value approach brings citizens and society back into public policy and management providing a counterweight to dominant models of policy and participation based largely upon economic individualism. In the case study section of this book we report on assessments of some organisation's outputs and perceived outcomes, against a full gamut of human value categories and have revealed the broad contribution made by organisations to public sphere. The case studies reveal that a public value approach does not necessarily require new resourcing– though a comprehensive public value management undoubtedly would. For many if not most organisations a public value management approach begins with appreciating and articulating what they do in a new light after a re-evaluation of their outputs from the standpoint of outcomes seen through the lens of human values. The organisations we collaborated with on this had not appreciated the extent of their public value contribution, or the benefits of articulating it. For policy makers, though, there is a much wider dimension to public value management.

A public value approach relates referents to the commonplace, the everyday and the often mundane of all citizens. From the foundations of human value profiles, it connects a referent with citizens and communities, with citizens eternal past, their aspirations for the future and gives them an appreciation for decision in the perpetual and uncertain present in which we live.

It is important to understand in, a public value assessment based upon human values categories as we have done, uses a universally recognised value set as its foundation. This key to appreciating the value of public value. A public value approach is inherently inclusive, no values or value position is privileged. All individuals possess and pursue, to a greater extent, the same set of values, though the priority they place on them will vary, perhaps significantly, as a consequence of their social, economic and biophysical contexts and their individual biographies but, to a greater or lesser extent, we all recognise these values. This universality gives great potential to a public value approach.

In a world of polycentric policy structures and diversity a public value approach provides a common language and lexicon to present and evaluate the outcomes of an organisation or the totality of complex policy structures. Consequently, a public value approach based upon the realisation of human values, their needs and motivations, is inclusive and democratic. By focusing upon the fundamental human value set it is neither prescriptive nor does it privilege any value position or worldview. In a world of diversity, public value is refreshingly accommodating and could form a timely basis for a new paradigm for public administration.

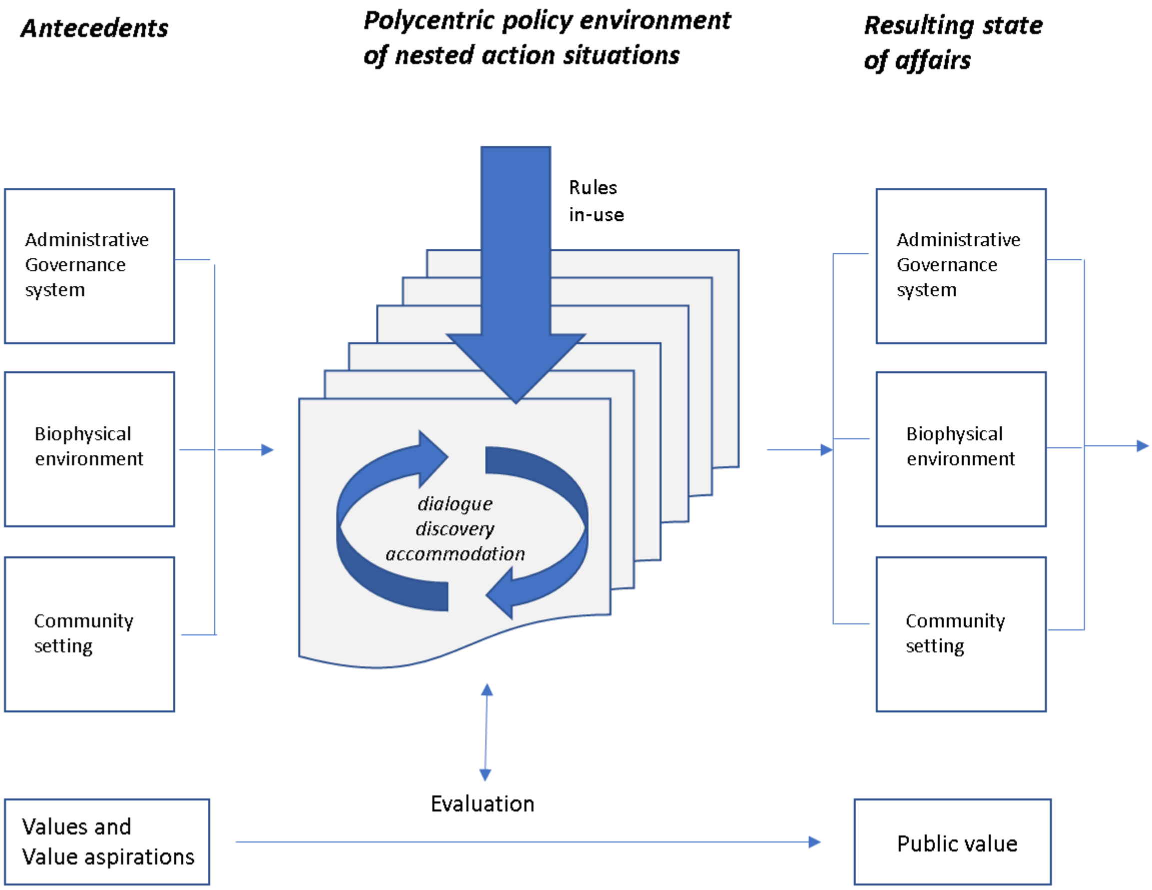
Drawing upon leading authors in the field (Ostrom 2010; Aligicia and Tarko 2013; Cole Epstein and McGinnis 2019) we propose a framework approach for actors to use to develop and evaluate elements in networks of policy and practice. Centred on action situations (Drawing upon Ostrom 2011) constructs designed to represent the set of processes in which a relevant set of actors interact in a specified period of time we can locate individual actors in social settings in the context of the natural and built environment within an administrative framework. Two key elements from a public value perspective are the Ostromian concepts of 'rules in use' which shape both individual and collective actions and 'evaluative criteria'. These concepts enable and constrain their interactions and appear to be especially powerful in the contexts of polycentric, hybrid policy environments such as we find today.

In today's complex polycentric policy and political environment the essential Ostromian framework of action situations, interlocking nested and cross-influencing describes the reality of an almost fractal-like environment in which self- similar structures and process of dialogue and interaction between a plurality and diversity of actors exist at all levels of analysis and geographical scales associated with policy outcomes.

Framed by rules (formal and informal) the concept of an action situation covers a range of institutional forms and all collaborative structure types within which actors interact. Individual actors, organisations, citizens and stakeholders, may be engaged in multiple action situations, some of which interact and set the rules of the game for others, whilst others may be unconnected from a hierarchy associated with superordinate, constitutional levels. For the analyst, the influence of interacting action situations will be an important though complex consideration. This concept of interacting action situations describes a world of interactive, collaborative structures, a polycentric policy environment characterised by complexity, collaboration and sometimes conflict. Within these settings one of the key problems is fragmentation and heterogeneity of values and value positions. Here, a public value perspective helps to work within this complex realm of political and public affairs providing a common language and lexicon based upon fundamental human values, needs and motivations.

The diagram below represents a modified IAD framework drawn to highlight two key processes associated with public value management which are especially relevant in a world of polycentricity and diversity.

Figure 13.1: Paradigm for public value governance in conditions of polycentricity and value heterogeneity



The diagram above (adapted from Cole et al 2019 after Ostrom 2005 and drawing upon insights from case studies in previous chapters) gives a rendering of a hypothetical policy setting. The complexity of the policy environment is represented as a series of related, nested action situations in the centre of the diagram within which actors interact to achieve outcomes. Precedent contextual conditions – the initial state of affairs – are represented on the left side and on the are right hand side of the diagram is the resulting or changed 'state of affairs' to take into account the outputs and outcomes associated with the interactions and policy intervention represented in the centre. Values and value aspirations are represented at the base of the diagram with human values and public value being configured as part of the evaluation of the outcomes of the policy process.

To this essentially Ostromian structure (After Cole et al 2019) we have added a public value dimension. This reveals how public value can make a contribution to the accommodation of value heterogeneity through the incorporation of public value concepts and imperatives in polycentric policy environments. Addressing the problems of polycentrism and value heterogeneity, namely fragmentation and a loss of control we add four extra elements…

- Firstly, adaptable *rules-in-use* with an ongoing dialogue about provision imposed at policy or constitutional level. In the UK and one could envisage the Treasury's public value framework as providing a set of rules and evaluative criteria. However, as we have seen earlier this policy fails to connect with interactions in 'subordinate' action situations.
- Secondly, a public value dynamic *within* action situations which provides a centripetal dynamic in diverse settings as ongoing processes of dialogue and discovery lead to appreciation and accommodation within given 'States of Affairs'.
- Thirdly, public value as overarching evaluative criteria set *between* policy levels accommodating and appreciating value contexts, and the dialogic, interactive processes between and within different levels in related action situations.
- Finally, the model itself includes a temporal perspective focusing upon value aspirations and value realisations from present and future states of affairs with the public inputting into the evaluative process within the context of the scope of rules-in-use a process accommodating diversity in value positions and aspirations.

The diagram renders the key elements and dynamics of a complex policy setting with interlocking and related action situations with actors interacting within a set of rules of the game and with an evaluative criteria process accommodating heterogeneous value positions and aspirations. In effect these are the key elements of a public value governance paradigm in which public value becomes a motivational dynamic across a set of action situations located within the context of a range of precedent, antecedent factors including administrative, biophysical and community contexts.

Earlier we have seen how influential discourses and socio-political contexts can be as salient in previous chapters in particular in relation to how social justice and social value are incorporated within influential action situations – both in respect of rules of the game and as evaluative criteria. The above rendering (figure 13.1) shows an iterative approach in which the action situations are shaped by the contextual conditions on the left of the diagram. The diagram accommodates a temporal dynamic – moving from left to right – with the resulting 'states of affairs' on the right-hand side taking into account a plurality of values and value positions appreciated by participants and accommodated by the interactive process itself. It has been suggested that public value may provide an approach to the management of complex, networked issues and systems by providing a process of 'democratic 'dialogue, debate and ultimately decision making it possible for people with different value positions and aspirations so peacefully co-exist and self-govern.

It may be that public value could form a paradigm for public administration and the governance of polycentric networks. Such an approach could help address the challenges of polycentricity and value heterogeneity by creating a process of dialogue and discovery in a wider model of governance in a networked world divided by diverse value positions.

As regards public value as a new paradigm of public administration. The evidence suggests that, at the practical level of organisational imperatives and public policy, an approach to public administration clearly needs a public value element to appreciate the wider value of products, policies, programmes to society, but it must respect and reflect the value of money and markets- and efficiency couched in those terms. Our evidence suggests that a new management paradigm based solely upon public value would fail to capture the reality of organisational structures and systems, but this needs to be seen in the context of the wider human experience. A public value approach based upon the realisation of outcomes consistent with, ultimately, human needs and motivations ‘humanises’ policy and practice in all sectors and allows us to appreciate whether an actor is ‘doing the right things’ rather than just ‘doing things right’.

Increasingly, the scope, scale and complexity of issues, and agendas, and the interpenetration of sectors, requires organisations to collaborate, co-ordinate and connect across scales and spaces. Today, working in polycentric, flexible and fluid networks within which relations with stakeholders is key, has become the norm for many organisations. In these networks of co-production, an inclusive public value dynamic based fundamentally upon universal human values allows an appreciation of outcomes beyond money and markets, such an arrangement creating a centripetal dynamic within polycentric networks accommodating a diversity and plurality of interests embracing both immaterial and material values.

14. Reflections for public policy in the UK

Patrick Diamond

Public value and public policy

The core theme of the volume is that public and private sector organisations throughout the economy and society generate not only economic and financial value, but *public value*. This section of the conclusion deals with the public policy implications of the public value framework that has been enunciated throughout the book. Public value as a concept enables organisations to grasp how they enrich the public and civic sphere beyond what is captured numerically on their balance-sheet, or through the price set in the market. As such, the conventional goal of economic efficiency does not adequately capture all of the activities and outcomes that citizens value and prioritise in the advanced democracies. The literature on public value emphasises that public value cannot simply be inferred from market value. Services, activities or outcomes might have ostensible little monetary value, but still generate results and returns that citizens and places value in strengthening the economic and social fabric of communities.

The concept of public value is likely to remain at the centre of UK and European public policy debate in the years ahead. We live in an era where not only are public resources constrained given the limits to how far governments can tax and borrow. There are infinite pressures on the state given rising structural demands in an ageing society. The Covid-19 pandemic has tested, almost to breaking-point, the resilience of our public services and our public sphere. governments in the future will have to extract value from every pound of public money they invest on behalf of citizens, not only in terms of efficiency, but in producing outcomes that citizens actually value. That requires governments, public agencies and private sector organisations to place the concept of public value at the centre of decision-making in policymaking and implementation.

The return of the public

Of course, a theme underlined throughout the book is the importance of being clearer about what we mean when we talk about ‘the public’ in the public value framework. Fifty years ago, the public in industrial societies would have been analysed in relation to monolithic sociological categories, most obviously occupational class. It was social class that shaped attitudes, beliefs and what it was thought citizens valued. Today, our societies have splintered and are much more fragmented. To some extent, indices such as age and education can much better explain public attitudes and values given the relative decline of social class. Communities are markedly more diverse across the UK according to Black and

Minority Ethnic (BME) status alongside gender. There is no longer (if there ever was) any monolithic ‘public’ or ‘civil society’.

Public value and new public management

The public value framework is fundamentally important in public policy for two main reasons. The first reason is that the public value framework constitutes a critique of the dominant approaches that have shaped public policy strategies in the advanced market democracies since the late 1970s. In so far as governments involve themselves in the sphere of policymaking, conventional economics centred on the assumption of *homo economicus* – the nostrum of rational economic man – has had enormous influence. Conventional economics compelled policymakers to focus on maximising technical economic efficiency, as measured by the public and private sector balance-sheet. This outlook was translated more directly into the new public management (NPM), a menu of organisational practices and techniques that were designed make the public sector leaner and more efficient.

Although NPM is now widely criticised, it is important to consider that by the mid-1970s, the public sector was vehemently attacked for being inefficient and dominated by producer interests. NPM had the advantage of clearly prescribing the problem – an inefficient, bloated, and bureaucratic public sector – and advocating a remedy – restructuring the public sector to more closely resemble the private sector. To an extent, NPM has rehabilitated the role of the state and the public sector in countries such as the United States, the UK, Australia, Canada and New Zealand, as well as many countries in western Europe. The Harvard Professor Mark Moore invented the concept of ‘public value’ to challenge the bureaucratic mind-set of public managers. He argued that a new form of public service leadership was necessary that put citizens and users at the heart of public provision. Nonetheless, NPM clearly led to unanticipated problems, many of which are illuminated by the burgeoning literature on public value. Moore acknowledged that NPM was not necessarily the right way to generate the maximum public return from assets and resources.

The second reason is that the diverse scholarship on public value offers an alternative framework for making choices and decisions about public policy that transcends the debilitating divide between states and markets in the advanced democracies. In *The Value of Everything,* the economist Professor Marianna Mazzucato demonstrates that a dynamic, thriving economy requires both effective state and market institutions. Most public policies do not involve choosing between the market and the state but resolving how best to combine them. The current Conservative government in the UK acknowledges the fundamental importance of industrial strategy, in which active government plays a critical role in generating growth in the economy. Partnership and regulation are crucial instruments of policymaking and reform. Much of the innovation that occurs in advanced economies results from public investment, most notably in the Research and Development ecosystem. NPM implied that the private sector was inherently superior to the public sector.

This assumption relied on a narrow understanding of productivity and economic efficiency, implying a false binary choice between the market and the state.

If public value draws attention to the wider set of outcomes and activity that citizens value in their lives, it demonstrates the limitations of pure efficiency focused NPM models. To an extent, however, thinking on public value is also catching up with developments in the private sector and the emergence of the so-called 'intangible' economy. Digital economy companies are emerging whose assets are almost purely intangible, rather than physical. *Apple* is the classic and perhaps best-known example. The assets are its design know-how, its human capital and its creativity. How to measure these intangibles is a major intellectual challenge beyond the models used in conventional economics. Increasingly, a similar challenge applies to organisations in the public sector and the public sphere that generate intangible value and assets. New digital technologies in particular means that there are also a lot of activities undertaken by households that conventional economic indicators do not quantify or capture.

Beyond GDP: rethinking economics

The work on public value mirrors the radical rethinking underway in the discipline of economics as an intellectual paradigm. Many economists over the last twenty years have been compelled to acknowledge that there are a multitude of goods and services that have non-monetary value, generating satisfaction for the user that is not captured in conventional economic indices. This turn away from orthodoxy is reflected in advances such as 'happiness economics' that seek to measure and quantify subjective wellbeing, quality of life and life satisfaction rather than focusing purely on narrow macro-economic indicators such as Gross Domestic Product (GDP). Forty years ago, the work of Ronald Inglehart drew attention to the growing importance of postmaterial values in western societies. It could no longer be assumed that a fast-growing society would be more contented or cohesive.

Moreover, the core assumption of rational economic man led to noticeable blind spots in public policy. One of the most pervasive was that what mattered in designing public policy were interventions that prioritised 'people' rather than 'places'. A generation of policies in the UK designed to reduce long-term unemployment, social exclusion and welfare dependency focused on equipping individuals with skills and human capital to ensure that they were better equipped to deal with the impact of structural economic change, notably deindustrialisation. The last thirty years of experience indicates that such measures are necessary, but not sufficient on their own. What also matters is the quality and richness of the economic and social fabric in the places that people live. Place shapes the individual's sense of motivation and self-worth. Moreover, as the Nobel prize-winning economists Abhijit Banerjee and Esther Duflo have shown, individuals in western countries tend to be 'sticky'. They do not simply move to where the best jobs and industries are located. They are bound to the relationships and networks where they live, underpinning their sense of place. And there are barriers to the free movement of people, not least the imposition of costs such as housing and childcare (where parents often rely on other family members). Public policy has to reflect this reality by directly addressing inequalities that relate to place, not only to the individual. It can do this by rebuilding the sense of locality and place, emphasising activities and services that generate lasting public value.

Levelling up the UK

The importance of this agenda is emphasised by the current government's commitment to 'levelling up' across the UK, in particular to closing the gap between the wealthy south east of England and the north which suffered most acutely from deindustrialisation after the Second World War. 'Levelling up' is a critically important agenda, but major disagreements remain among policymakers about how it can most effectively be achieved. One important question concerns how places such as towns should relate to cities and urban areas where economic activity is agglomerated. The consensus among planners has been that returning industry to such places is all but impossible given the long-term decline of skills, and the shift in comparative advantage to the Asian economies. The focus should be turning towns into attractive places for commuters from surrounding cities where wealth is predominantly located. Other economists have argued such an approach is overly pessimistic. governments should use the instruments of public policy to promote reindustrialisation, for example, by giving regional assistance and subsidies to firms that relocate to such places, mirroring the policies of the 1960s.

Another question is about the importance of 'mega' infrastructure projects to levelling-up. Across the industrialised economies, regional economic policies have focused heavily on physical infrastructure, particularly within the European Union (EU). That approach is understandable. Projects such as the high-speed rail line HS2 connect people and places nationally and globally. They enable the transfer and mobility of skills and human capital. The impact of physical infrastructure is easier to measure and quantify using conventional approaches such as cost/benefit analysis. Yet the public value approach demonstrates that citizens can struggle to appreciate the value of these grand projects. For example, research on the nuclear industry has demonstrated that local communities are reluctant to acknowledge the positive socio-economic impact of a particular facility or asset, particularly if young people in that area lack the skills and human capital necessary to be the direct beneficiaries.

This disjuncture may also reflect the traditional emphasis in public policy on 'physical' rather than 'social' infrastructure. Priority is often given to tangible bricks and mortar projects. Understandably, Ministers want to open stunning new public buildings, roads or airports that have an enduring physical presence. Yet what the public and citizens may value are fewer tangible services that connect them to the community, offering support, networks and relationships: from childcare and job-matching programmes to practical assistance for older people. Evaluation of the English regeneration programmes of the 2000s, notably the New Deal for Communities (NDC), has demonstrated that too often new buildings in poor areas have lain empty or underused. They were not greatly valued by local residents as they had too little connection with their lives, and the fabric of their neighbourhoods and communities. The public value framework elaborated in this volume can help to capture the real value that citizens accord to intangible, as well as tangible, public and private investment and assets.

The Treasury Green Book and social value

It is important to emphasise that public value is already having a direct impact on the thinking of policymakers and reshaping the nature of the policy process in the UK. In 2013, the UK Government passed the Social Value Act into law. The Social Value Act requires commissioners of public services to award contracts that generate the most value to citizens individually and collectively, rather than simply being provided at the lowest cost. The UK Government has in turn re-written the Treasury Green Book to emphasise the importance of public value in contracting and commissioning public services. The government of Wales has recently pioneered the Future Generations Act. The Act, 'requires public bodies in Wales to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change'. This approach compliments and reinforces the public value framework.

Yet governments have struggled to entrench the public value concept at the heart of policymaking, not least because it remains (like public sector productivity) difficult to reliably measure. There is potential to go much further in placing public value at the centre of UK policymaking. In the remainder of this concluding chapter, we briefly outline our proposals for embedding public value.

Putting citizens at the heart of decision-making

Enhancing public value means giving citizens the opportunity to shape the decisions that affect their lives, particularly in relation to crucial areas such as planning, housing and infrastructure. An important innovation is the use of deliberative mechanisms such as citizen's juries which are gaining ground in many western democracies, including the UK. This volume has demonstrated that enabling citizens to directly engage with, and get involved in, local decision-making generates public value in itself. The devolution experiment underway in England since the 2000s has a particularly important role to play, transferring decisions from the centre in Whitehall to localities and communities closer to where citizens actually live. The devolution process itself helps to create public value.

Strengthening the capacity for partnership and measurement

One of the key reasons why public services generate less public value than anticipated is because problems fall between the cracks of conventional organisational boundaries. To generate value, we need public and private organisations that are prepared to work together in the public interest. That means new forms of partnership that transcend orthodox institutional boundaries. The incentives operating in public services can also have perverse effects. government Ministers fight to secure the largest budget available for their department. They measure success in terms of inputs – how many doctors, nurses or teachers are employed. A hospital's success is assessed in terms of how many clinical procedures it carries out in a given financial year. Yet all of this activity, although important, occurs irrespective of its real impact in generating public value for citizens. This relates to improving measuring frameworks.

Devising public value measurement frameworks

A host of actors in government and civil society have been developing new techniques and tools to measure and track public value over the last twenty years. Organisations from the British Broadcasting Corporation (BBC) to the Cabinet Office and the National Endowment for Science, Technology and the Arts (NESTA) have invested in developing new public value measurement frameworks that offer a more nuanced perspective on the value that is created by the public and private sectors. Policymakers in particular have welcomed the perspective afforded by the public value framework:

- Providing public agencies with tools and a rationale to justify and legitimise the allocation of public money.
- Improving the quality of decision-making by strengthening the evidence base in public policy.
- Challenging the purely technocratic, expert-led model of policy design.
- Ensuring that policy draws on the knowledge and lived experience of service users, citizens and those at the front-line of delivery.
- Helping to inform citizens about the strategic dilemmas that confront politicians and public managers given the 'limits of the possible' in a world of scarce resources.
- As a consequence, dealing more effectively with the management of social and political risk (Coyle, 2007, page 12).

The 'What Works' Centres established by the Cameron government to incentivise an evidence-based approach to policymaking have a particularly important role in capturing public value. As Geoff Mulgan, the former Chief Executive of NESTA explains, they are explicitly concerned with the trade-offs involved in committing resources and generating public benefit, determining whether the scale of the benefit justifies the public investment. It is vital to build on the good practice being advanced by the network of What Works centres. Even so, more research is needed to uncover what it is that citizens and the public value most, where possible making use of new techniques for generating real time data.

Creating public value institutions

Finally, institutions that succeed in the next century will have to negotiate unprecedented uncertainty and complexity. To manage these challenges, they should aim to become public value institutions. Universities in particular should take the lead in transforming themselves into public value organisations. Higher Education Institutions (HEIs) in the UK have been shown to generate enormous value on conventional measures such as GDP. Britain in the last thirty years has become a global leader in HE. Yet despite their role as critical 'anchor' institutions in local communities, the wider public may fail to appreciate or understand what it is that universities do and the value they generate in the economy and society. HEIs certainly need global connections. But they have to be nested within their local context overseen by a governance architecture that enables a variety of local and national stakeholders to contribute to the work of that university.

Future governance, public value and the pandemic

Public value as a paradigm has even greater relevance in the era of the pandemic. The critical issue raised by the recent Covid-19 crisis concerns the future of UK governance, and how we should redesign public policy to deal more effectively with future systemic risks from pandemics to climate change. Other crucial themes are fast emerging in relation to governance and public value. Firstly, how can public agencies and authorities help to anticipate and prevent problems from occurring at the outset? Secondly, is there an optimal balance to strike between decentralising responsibility locally and regionally, and resorting to the use of central state power? It seems clear that effective 'multi-level' governance creates capacities for policy action and policy learning at different tiers of the state, tailoring responses to the needs of local communities. Thirdly, how can citizens and communities be more effectively mobilised and involved in pursuit of the shared goal of greater resilience? Resilience is itself an expression of public value.

All of these questions relate to embedding public value in our economies and societies. They concern the value generated by public action and activity beyond what is priced in a market or captured on an organisation's balance-sheet. That involves a paradigm shift in our thinking about governance and public policy. Crises are rare moments where windows of opportunity for radical change open up. They provide the impetus for far-reaching innovation and experimentation across the entire landscape of UK public policy. Given the need for serious reform that can strengthen the commitment to public value and entrench resilience across our economy and society, we must not allow the current crisis in our countries to go to waste.

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