The role of women in logistics.
A Comparative study of traditional and modern supply chain management in Nigeria.

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Introduction

In recent years, there has been increasing recognition of the important role women leadership plays in shaping the management and development of logistics and supply chain sector. The logistics industry is undergoing a transformative shift, with women assuming leadership roles and making significant contributions to its growth and sustainability. A combination of factors is responsible for the transformative shift giving women strategic opportunities and responsibilities to excel in logistics leadership due to advancement in education which has significantly transfer the crude traditional approach to logistics management. In this context, it is imperative to examine and understand the specific role that women leadership plays in driving innovation, efficiency, and competitiveness within the logistics sector. By exploring the experiences, challenges, and successes of women leaders in logistics, this study seeks to investigate and define a framework for overcoming the barriers preventing active participation and leadership of women in logistic management in emerging economies such as Nigeria.

Background and Context

Traditionally, the logistics sector has been characterized by a male-dominated workforce and leadership landscape, reflecting broader societal gender norms and biases. However, in recent decades, there has been a notable shift towards greater gender diversity and inclusion within the industry. This shift is driven by several factors, including changes in societal attitudes towards gender equality, increased access to education and training for women, and recognition of the untapped potential that women bring to leadership roles.

Specific barriers to women's participation in supply chains in emerging economies include traditional gender roles, lack of access to education and training, cultural norms restricting women's mobility and decision-making power, limited access to finance and resources, and discriminatory practices in hiring and promotion within both modern and traditional supply chain sectors.

Against this backdrop, it is essential to examine the specific role that women leadership plays in driving the development and advancement of the logistics sector. By understanding the experiences, perspectives, and contributions of women leaders, organizations can leverage diversity as a strategic advantage, foster inclusive work cultures, and drive innovation and growth within the industry.

Statement of the Problem

In Nigeria, the logistics sector is vital for facilitating trade, commerce, and economic development. However, despite its significance, women remain significantly underrepresented in leadership positions within the industry. This underrepresentation poses a multifaceted problem with several implications for the sector's development and overall societal progress.

Firstly, the lack of gender diversity in leadership roles hinders the industry's ability to harness the full spectrum of talent and perspectives. This not only limits opportunities for women to contribute their unique skills and insights but also stifles innovation and creativity within logistics organizations.

Additionally, the absence of female role models and mentors in leadership positions may deter young women from pursuing careers in logistics, further exacerbating the gender imbalance in the industry. Overall, addressing the underrepresentation of women in leadership roles within the Nigerian logistics sector is crucial for fostering inclusivity, driving innovation, and unlocking the industry's full potential for sustainable development and economic growth.

Aim and objectives of the study.

The aim of this study is to examine the role of women in logistics management in Nigeria. The objectives are to:

1. Examine traditional and modern logistics to evaluate the status of women in sustainable supply chain practices within the logistics sector.
2. Identify the challenges and barriers faced by women in advancing their careers in logistics management.
3. Examine strategies for overcoming the challenges and barriers in promoting gender equality in logistics organizations.

LITERATURE REVIEW

Historical Perspective of Women in Logistics Management

The historical perspective of women in logistics management reveals a landscape marked by systemic barriers and societal norms that limited their participation and advancement within the industry (Kiamba., 2009). Traditionally, logistics was perceived as a male-dominated field, with women relegated to support roles or excluded altogether from leadership positions.

Historically, cultural norms and gender biases often restricted women's access to education and training opportunities in logistics-related fields (Carter et al., 2015), further aggravating their underrepresentation in managerial roles. Additionally, discriminatory hiring practices and entrenched gender stereotypes perpetuated the notion that women lacked the skills or capabilities necessary for success in logistics leadership positions (Ceci et al., 2014).

Despite these challenges, women have long been actively participating and playing crucial roles which are often overlooked in the logistics sector (Akyeampong, E. and Fofack, H., 2012), particularly during times of war or crisis when they stepped into operational roles to support supply chain activities. However, their contributions were often undervalued or unrecognized within a predominantly traditional and male dominated industry (Muogboh and Ojadi 2018).

Current Status of Women in the Logistics Sector in Nigeria

In Nigeria, the status of women in the logistics sector reflects a gradual but persistent shift towards greater inclusion and representation (Adeleke, A., 2022). Traditionally, women in Nigeria faced significant barriers to entry and advancement in the logistics industry, with cultural norms and gender biases often limiting their opportunities for employment and career progression (Hay and Wright 1982). However, in recent years, there has been a noticeable increase in the number of women entering the logistics sector, particularly in administrative and operational roles (Adeleke., 2022).

Despite this progress, women remain underrepresented in leadership positions within Nigerian logistics companies, with men still dominating managerial and decision-making roles (Okafor and Akokuwebe., 2015). Gender-based discrimination and stereotypes continue to pose challenges for women seeking advancement in the industry, perpetuating a glass ceiling effect that hinders their career growth (Okafor and Akokuwebe., 2015).

Overall, while the status of women in the Nigerian logistics sector today, shows signs of improvement, there is still much work to be done to achieve gender parity and ensure equal opportunities for women to succeed and thrive in leadership roles within the industry (Enyiukwu., 2020).

Challenges and Barriers Facing Women in Logistics Management

Challenges and barriers facing women in logistics management in Nigeria are multifaceted and deeply rooted in societal norms, organizational cultures, and systemic biases (Enyiukwu., 2020). Afolabi and Olasupo., 2008 added that, gender stereotypes perpetuate the belief that women are less capable or suited for leadership roles in the logistics sector, leading to limited opportunities for career advancement and unequal treatment in the workplace.

Secondly, work-life balance challenges disproportionately affect women in logistics management, as they often bear the burden of household responsibilities and caregiving duties, hindering their ability to fully commit to their careers (Enyiukwu., 2020).

Additionally, gender discrimination and unconscious bias present significant obstacles for women seeking leadership positions in logistics companies. Women may encounter resistance from male colleagues or face subtle forms of discrimination in recruitment, promotion, and salary negotiations (Anigwe., 2014).

Furthermore, Anigwe., (2014) adeded that, lack of female role models and mentors in the logistics industry deprives women of valuable support networks and guidance for navigating career challenges and overcoming barriers to advancement.

Lastly, inadequate access to training and development opportunities further exacerbates the gender gap in logistics management, as women may not have equal access to resources and support for enhancing their skills and competencies (Igiebor, O., 2021).

Addressing these challenges requires concerted efforts from both organizations and society at large to dismantle gender stereotypes, promote inclusivity, and create supportive environments that empower women to thrive in leadership roles within the logistics sector (Igiebor., 2021).

Success and Best Practices of Women in Logistics Management

Anigwe., (2014) further argued that women in logistics management in Nigeria have demonstrated resilience, competence, and innovation, paving the way for success despite facing numerous challenges. While Afolabi and Olasupo., 2008 stated that some of the best practices include actively seeking mentorship and networking opportunities, advocating for gender diversity and inclusion in the workplace, and leveraging their unique perspectives and skills to drive organizational growth and innovation. Additionally, women leaders in logistics have shown the importance of continuous learning and professional development, staying abreast of industry trends and embracing new technologies to enhance efficiency and effectiveness in their roles. Through their exemplary leadership and contributions, women in logistics management are inspiring positive change and breaking barriers for future generations (Udeozor and Ebuk, 2021).

Theoretical Frameworks and Conceptual Models Relevant to Women in Logistics

Theoretical frameworks and conceptual models relevant to women in logistics encompass various perspectives and approaches that shed light on the gender dynamics within the industry. This research develops a framework that describes the modality of applying two prominent theories to define dynamism and evolutionary leadership role devoid of inequality and discrimination. One such framework is feminist theory, which examines power dynamics, gender inequalities, and discrimination against women in the workplace. It highlights the need for systemic changes to address structural barriers and promote gender equity in logistics management.

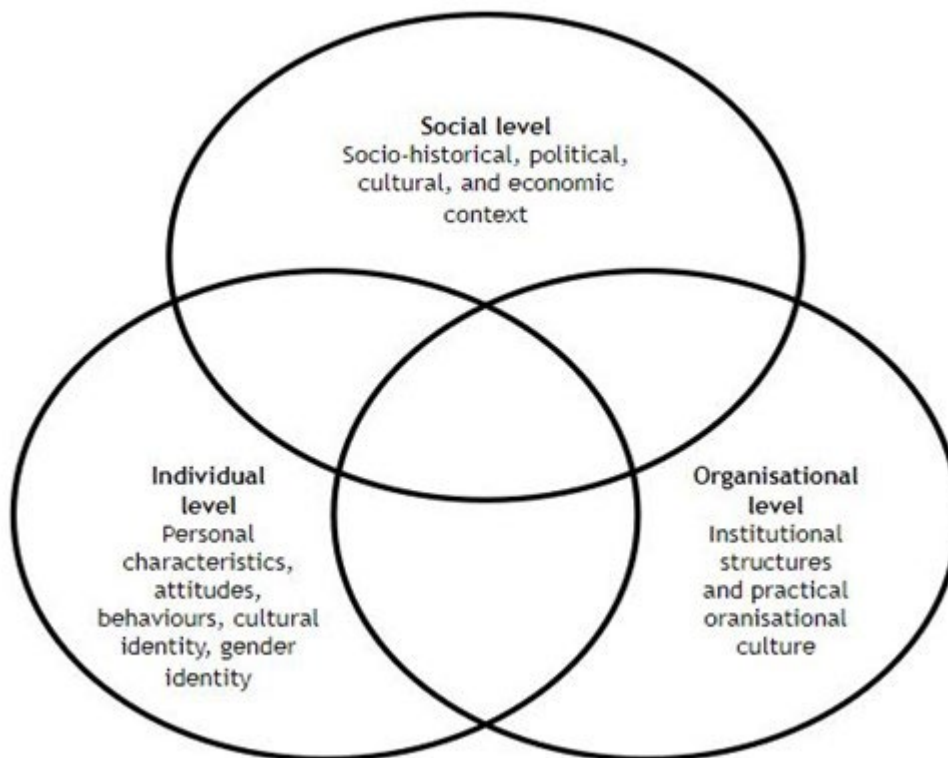Additionally, intersectionality theory emphasizes

the interconnected nature of gender with other social identities such as race, class, and ethnicity. It underscores the importance of understanding how multiple forms of discrimination intersect to create unique challenges for women in logistics, particularly those from marginalized or underrepresented groups.

Furthermore, social cognitive theory examines how individuals learn and develop gender roles and stereotypes through socialization processes. This framework underscores the importance of

challenging traditional gender norms and fostering inclusive environments that empower women to succeed in logistics management roles.

By integrating these theoretical perspectives, researchers and practitioners can gain a deeper understanding of the factors influencing women's experiences in the logistics industry and develop strategies to promote gender equality and inclusion.

Conceptual framework of the construct

Conceptual framework of the study adopted from (Jackson 2004)

From the above, African feminism and postcolonial theory offer valuable lenses for understanding gender dynamics at the meso-level. African feminism critiques Western feminism's individualism and dichotomous gender framework, emphasizing the historical roles of men and women in traditional African societies. It challenges the universal

subordination of women, highlighting women's autonomy in economic, social, and political spheres, and their central role in societal preservation. Pre-colonial gender roles in Africa were not solely based on anatomical distinctions, but on complementary roles within a harmonious societal framework. However, some scholars argue that gender hierarchy became more pronounced during colonialism and postcolonialism, intertwined with so-

cietal structures. The corporate model of gender relations in Africa emphasizes interdependence within social groups over individual interests, impacting work/family dynamics for African women leaders and managers. Overall, these frameworks provide nuanced insights into the complexities of gender relations in Africa, shedding light on historical continuities and disruptions, as well as the diverse experiences of African women.

Methodology and Research Design

Related literature review was conducted on the role of women in logistics management was adopted as a systematic approach to gather, evaluate, and synthesize existing research on the topic. The methodology involves several key steps. Firstly, an extensive search was conducted across academic databases, journals, and relevant sources to identify scholarly articles, books, reports, and other publications addressing the role of women in logistics management. Search terms will include variations of „women," „gender," „logistics

management," „supply chain," and related terms. Secondly, a thorough screening process was employed to select studies that meet inclusion criteria, such as relevance to the research topic, publication date, and academic rigor. From the Selected studies critical appraisal to assess their methodological quality and relevance to the research objectives was implored to evaluate the status of women participation in active leadership in logistics management.

Data extraction used in this study involve extracting key findings, themes, and insights from the selected studies. A thematic analysis approach is also employed to identify recurring patterns, trends, and gaps in the literature. Finally, findings were defined and synthesized to provide a comprehensive overview of the current state of knowledge on the role of women in logistics management, highlighting key themes, challenges, opportunities, and areas for future research. Below are the key journals that support substantial part of our findings and conclusions.

SN	Title of article	Author (s)	Year of Publication
1	Hierarchies, jobs, bodies: A theory of gendered organizations. Gender and Society	Acker, J.	1990
2	Gender in the boss−subordinate relationship: A Nigerian study. Journal of Organizational Behavior	Adebayo, D.O. and I.B. Udegbe	2004
3	Management training programmes: The influence of managerial status, gender and age on learning effectiveness. Ife Psycholoy	Akintayo, D.I	2006
4	Male daughters, female husbands: Gender and sex in an African society.London: Zed Books	Amadiume, I..	1987
5	Gender diversity in the perception of organisational politics in South Africa. South African Journal of Labour Relations 31(2): 68−84.	Beaty, D., M. Adonisi and T. Taylor.	2007
6	Our separate ways: Black and white women and the struggle for professional identity. Boston: Harvard Business School Press.	Bell, E. and S.M. Nkomo.	2001.
7	Barriers to acceptance, satisfaction and career growth: Implications for career development and retention of women in selected male occupations in Nigeria.	Women in Management Review 22(1): 68−78.	2007.
8	Gender equality at work in sub-Saharan Africa: A case study of Mali's modern sector. International Labour Review 142(3): 295−316.	Doumbia, S. and S. Meurs.	2003
9	A feminist analysis of organizational research on sex differences. Academy of Management Review 32(4): 1121−1143.	Ely, R. and I. Padavic.	2007

10	South African women: Changing career patterns. In Competitive frontiers, ed. N.J. Adler and D.N. Izraeli, 325–342. Oxford: Blackwell.	Erwee, R.	1994
11	Perceived masculine and feminine attributes examined as a function of individuals; sex and level in the organizational power hierarchy: A test of four theoretical perspectives. Journal of Applied Psychology 75: 204–211.	Fagenson, E.A.	1990.
12	Transforming organisations: Management cultures, women and leadership in South Africa. Unpublished paper, University of Réunion.	Johnson, D..	1999
13	Expatriate women managers: At the crossroads of success, challenges and career goals. Women in Management Review 17(1): 18–28.	Mathur-Helm, B.	2002.
14	Gender and the relationship between perceived fairness in pay, promotion and job satisfaction in a sub-Saharan African economy. Women in Management Review 21(3): 224–240.	Okpara, J.O.	2006
15	The female gender in traditional leadership In Nigeria: A socio-cultural perspective. In Engendering Leadership Through Research and Practice Conference Proceedings, Perth, 21–24 July 2008. (Vol. 21, p. 8).	Afolabi, M.M. and Olasupo, F.A.,	2008, July
16	Historical Perspectives of Women Deprivation from Leadership and their Empowerment for National Development in the 21st Century, Nigeria.	Udeozor, R.K. and Ebuk, L.E.,	2009

The Role of Women in Logistics Management in Nigeria

The role of women in logistics management in Nigeria is evolving, with increasing recognition of their contributions to organizational success and industry advancement. Women leaders in logistics play pivotal roles in decision-making, operational management, and driving innovation (Piyatilake-et al., 2024). Despite facing challenges such as gender stereotypes and unequal opportunities, women in Nigeria are making significant strides in leadership positions, promoting diversity, and fostering inclusive work cultures. Their expertise, resilience, and dedication are instrumental in shaping the future of the logistics sector and driving economic growth and sustainability in Nigeria (Udeozor and Ebuk, 2021)).

Economic and Social Importance of Women in Logistics

Women play a crucial role in the economic and social aspects of the logistics industry in Nigeria. Economically, women contribute to the sector's productivity and efficiency through their participation in various roles, from supply chain management to transportation and warehousing (Knemeyer, Murphy. and Poist., 1999). Their involvement helps drive economic growth, create employment opportunities, and enhance overall industry performance. Socially, women's presence in logistics promotes gender equality, empowers communities, and breaks down traditional gender norms. By providing leadership, expertise, and diverse perspectives, women contribute to building more inclusive and equitable societies while fostering sustainable development in Nigeria's logistics sector (Udeozor and Ebuk, 2021).

Women's Leadership and Decision-Making in Logistics Organizations

Women's leadership and decision-making in logistics organizations in Nigeria are increasingly recognized as essential drivers of innovation and success. As more women assume leadership roles, they bring diverse perspectives, strategic thinking, and collaborative approaches to decision-making processes ((Piyatilakeet al., 2024)). Their inclusive leadership styles prioritize team-

work, employee development, and stakeholder engagement, leading to more effective problem--solving and decision outcomes. By championing diversity and fostering inclusive work cultures, women leaders in logistics organizations contribute to improved performance, employee satisfaction, and organizational resilience. Their influence is instrumental in shaping the future direction and competitiveness of the logistics industry in Nigeria (Udeozor and Ebuk, 2021).

Contributions of Women to Sustainable Supply Chain Management

Women make significant contributions to sustainable supply chain management in Nigeria by promoting environmental stewardship, social responsibility, and economic resilience. Their holistic approach to decision-making integrates sustainability principles into procurement, production, and distribution processes, driving efficiency and reducing environmental impact (Knemeyer, Murphy. and Poist., 1999). Women leaders prioritize ethical sourcing, fair labour practices, and community engagement, fostering long-term relationships with suppliers and stakeholders. By embracing sustainable practices, women enhance the resilience of supply chains, mitigate risks, and create value for businesses and society. Their leadership in sustainable supply chain management contributes to building more resilient, equitable, and environmentally conscious supply chains in Nigeria (Afolabi and Olasupo., 2008).

Challenges and Opportunities

Challenges facing women in logistics management in Nigeria include gender bias, limited access to leadership opportunities, and work-life balance issues. However, there are opportunities for change, including increasing awareness of gender equality, advocacy for inclusive policies, and support for women's education and training (Okafor and Akokuwebe., 2015). Organizations can capitalize on diverse talent by promoting gender diversity in leadership roles, implementing flexible work arrangements, and providing mentorship programs. Addressing these challenges and embracing opportunities for gender inclusion

can enhance organizational performance, foster innovation, and create more equitable workplaces in the Nigerian logistics sector (Afolabi and Olasupo., 2008).

Women in logistics in Nigeria face various gender-based challenges, including discrimination, limited access to leadership roles, and unequal opportunities for career advancement. Cultural norms and biases perpetuate stereotypes about women's capabilities, hindering their professional growth. However, there are opportunities for advancement and empowerment. Organizations can promote gender equality through inclusive policies, mentorship programs, and leadership development initiatives tailored to women (Afolabi and Olasupo., 2008). Additionally, advocacy efforts and awareness campaigns can challenge gender stereotypes and promote a more inclusive work culture. Providing training and educational opportunities for women in logistics can enhance their skills and competencies, preparing them for leadership roles. By addressing gender-based challenges and fostering opportunities for empowerment, the Nigerian logistics sector can harness the full potential of women, driving innovation, and achieving sustainable growth (Okafor and Akokuwebe., 2015).

Strategies for Overcoming Gender Barriers in Logistics Management

Overcoming gender barriers in logistics management in Nigeria requires a multifaceted approach that addresses systemic issues while promoting cultural and organizational change. Firstly, organizations should implement policies and practices that promote gender diversity, including gender--neutral recruitment and promotion processes and equal pay for equal work. Secondly, fostering inclusive work cultures where diversity is valued and celebrated can help create environments where women feel empowered to contribute and advance. Providing mentorship and leadership development programs specifically tailored to women in logistics can offer support and guidance for career growth. Additionally, raising awareness

about gender biases and stereotypes through training and education can challenge existing norms and promote equality. Collaboration between government, industry, and civil society is crucial for driving systemic change, including advocating for policies that promote gender equality and provide resources for women's empowerment in logistics (Okafor and Akokuwebe., 2015). Finally, promoting positive role models and showcasing success stories of women leaders in the industry can inspire and motivate future generations of female professionals. By implementing these strategies, the logistics sector in Nigeria can break down gender barriers and create opportunities for women to thrive and contribute to its success.

Conclusion

In conclusion, the role of women in logistics management in Nigeria is pivotal for driving innovation, fostering inclusivity, and achieving sustainable growth in the industry. Despite facing numerous challenges, including gender biases and limited access to leadership opportunities, women in Nigeria's logistics sector have demonstrated resilience, competence, and leadership capabilities. Through their contributions, women leaders have promoted diversity, enhanced organizational performance, and empowered communities. Moving forward, it is imperative for organizations and stakeholders to continue championing gender equality, implementing inclusive policies, and providing support and opportunities for women's advancement. By leveraging the full potential of women in logistics management, Nigeria can unlock new sources of talent, drive innovation, and build more resilient and equitable supply chains that benefit businesses, society, and the economy. Ultimately, fostering gender diversity and inclusion is not only the right thing to do but also essential for ensuring the long-term success and sustainability of the logistics industry in Nigeria.

Summary of Findings

The findings of this study highlight the significant contributions of women in logistics management in Nigeria, despite facing various challenges.

Women leaders play crucial roles in decision-making, driving innovation, and promoting sustainability within the industry. However, gender biases, limited access to leadership roles, and work-life balance issues remain significant barriers to women's advancement. Organizations can address these challenges by implementing inclusive policies, providing mentorship and leadership development programs, and fostering inclusive work cultures. Additionally, there are opportunities for advocacy and awareness-raising to challenge gender stereotypes and promote gender equality in the logistics sector. By leveraging the talents and capabilities of women, Nigeria's logistics industry can achieve greater diversity, resilience, and competitiveness, ultimately driving economic growth and social development in the country.

Implications for Practice and Policy

The findings of this study have several implications for both practice and policy in the Nigerian logistics sector. From a practical standpoint, organizations can benefit from implementing inclusive policies and programs that promote gender diversity, provide support for women's career advancement, and foster inclusive work cultures. This includes initiatives such as mentorship programs, leadership development training, and flexible work arrangements to accommodate work-life balance needs. Additionally, policies should be put in place to address gender biases and promote equal opportunities for women in leadership positions. On a policy level, there is a need for government intervention to advocate for gender equality and create an enabling environment for women's empowerment in the logistics sector. This may involve implementing legislation to address workplace discrimination, providing financial incentives for companies that prioritize gender diversity, and investing in education and training programs to enhance women's skills and competencies in logistics management. Overall, by prioritizing gender inclusion and equity in both practice and policy, the Nigerian logistics sector can unlock the full potential of women, driving innovation, and sustainable growth in the industry.

Recommendations for Future Research

Future research in the field of women in logistics management in Nigeria should explore several avenues to deepen our understanding and address existing gaps. Firstly, longitudinal studies tracking the career trajectories of women in the industry can provide insights into the factors influencing their advancement and retention. Additionally, comparative research examining the experiences of women across different sectors within the logistics industry and across various regions of Nigeria can highlight variations in gender dynamics and identify best practices for promoting gender equality.

Furthermore, this research explores the various dimensions of gender with other social identities, such as race, ethnicity, and socioeconomic status, can provide a more nuanced understanding of women's experiences and challenges in logistics management. Finally, qualitative studies capturing the voices and perspectives of women leaders in the sector can offer valuable insights into their lived experiences, strategies for success, and recommendations for promoting gender equality in the Nigerian logistics industry.

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