



Digital Inclusion in Nigeria: Bridging the Gender Gap in the Tech Revolution

Abstract

This study examines the necessity of narrowing the gender gap in technology adoption within Nigeria's ever-changing economic landscape, employing a targeted economic perspective. The driving force behind our research stems from the recognition that advancements in technology have the potential to exert substantial impact on economic systems, thereby affecting gender-related disparities in economic outcomes. The objective of this study is to provide a unique and valuable contribution to the field of economics by the careful analysis of official and pertinent documents, resulting in thorough empirical insights.

This study endeavors to develop a comprehensive economic narrative on technology adoption by employing a rigorous mathematical technique that is firmly rooted in the analysis of official documents, reports, and other relevant sources. The emphasis on authoritative records guarantees that the examination incorporates economic indicators such as employment trends, disparities in income, and chances for economic advancement. This approach establishes a robust basis for comprehending the economic aspects of the gender disparity in technology use. Initial findings, obtained through the examination of authoritative records, shed light on a significant disparity based on gender. This phenomenon involves a disparity in digital literacy rates between women and men, as well as their underrepresentation in crucial economic sectors driven by technological progress. Through the process of extracting valuable insights from authoritative sources, our research serves to emphasize the economic ramifications associated with the gender disparity. In doing so, we provide a comprehensive viewpoint on the economic obstacles encountered by women in Nigeria with regards to their inclusion in the digital realm.

This research contributes to the academic discussion on digital inclusion by providing empirical findings that shed light on the economic consequences of gender inequalities in technology adoption in Nigeria. The prioritization of official records facilitates a systematic and credible examination of the economic difficulties encountered by women, promoting a nuanced comprehension of the economic consequences resulting from gender disparities in the nation's technology-driven economic development.

The analysis of authoritative documents will yield quantitative economic findings that can be utilized as a dependable foundation for formulating evidence-based economic policies and focused actions. Our aim is to stimulate economic development in Nigeria by tackling gender disparity and encouraging inclusive economic growth. This will be achieved by providing information to economic players, policymakers, and economists using official documentation as a lens.

Background

The gender gap within Nigeria's rapidly expanding tech sector is a crucial concern that needs to be addressed, and digital inclusion plays a vital role in this matter. In Nigeria, the Information and Communication Technology (ICT) industry has experienced significant expansion, making up 18% of the country's Gross Domestic Product (GDP) in the second quarter of 2022. This is a substantial increase from less than 1% in 2001, according to the World Economic Forum (2023). Notwithstanding, even with this expansion, the training of a large number of women in digital literacy by the National Information Technology Development Agency (NITDA) to improve their economic prospects and implementation of policies targeted at enhancing the availability of broadband connectivity and promoting digital skills, the involvement of women in the technology industry remains notably limited, as only approximately 30% of technology companies are owned by women, and a large number of these companies have no female employees at all despite the growth in the Nigerian tech ecosystem by \$4.9 billion in 2021 and a robust growth in 2022 (Banyan Global, 2022; ONE Campaign & Center for Global Development, 2020; Onyemachi, 2022).

The gender digital divide in Nigeria is a manifestation of wider societal obstacles, encompassing economic limitations, cultural prejudices, restricted educational opportunities, and insufficient infrastructure. In rural areas, the absence of electricity and cultural norms that limit women's movement and access to public charging points impede their capacity to properly utilize digital technology with only 1 out of 10 females having access to the internet (Africa-China Reporting Project, 2018; Tech Herfrica, 2023; National Bureau of Statistics, 2023).

Research Questions

- What is the impact of digital literacy initiatives on narrowing the gender gap in technology use among women in Nigeria?
- What factors contribute to the underrepresentation of women in crucial economic sectors driven by technological progress in Nigeria?
- How do disparities in technology adoption between men and women affect employment trends and opportunities for economic advancement in Nigeria?

Materials and Approach

The study relies on authoritative records, reports, and other relevant sources for its analysis. The approach is systematic and credible, aiming to provide nuanced insights into the economic difficulties faced by women in Nigeria due to gender disparities in technology adoption.

Process

The study involves a thorough examination of official documents to identify disparities in digital literacy rates and women's underrepresentation in key economic sectors driven by technological progress.

Adult literacy in Nigeria is lower among women than among men (2018)

Adult literacy rate, by sex (% of people ages 15 and above)

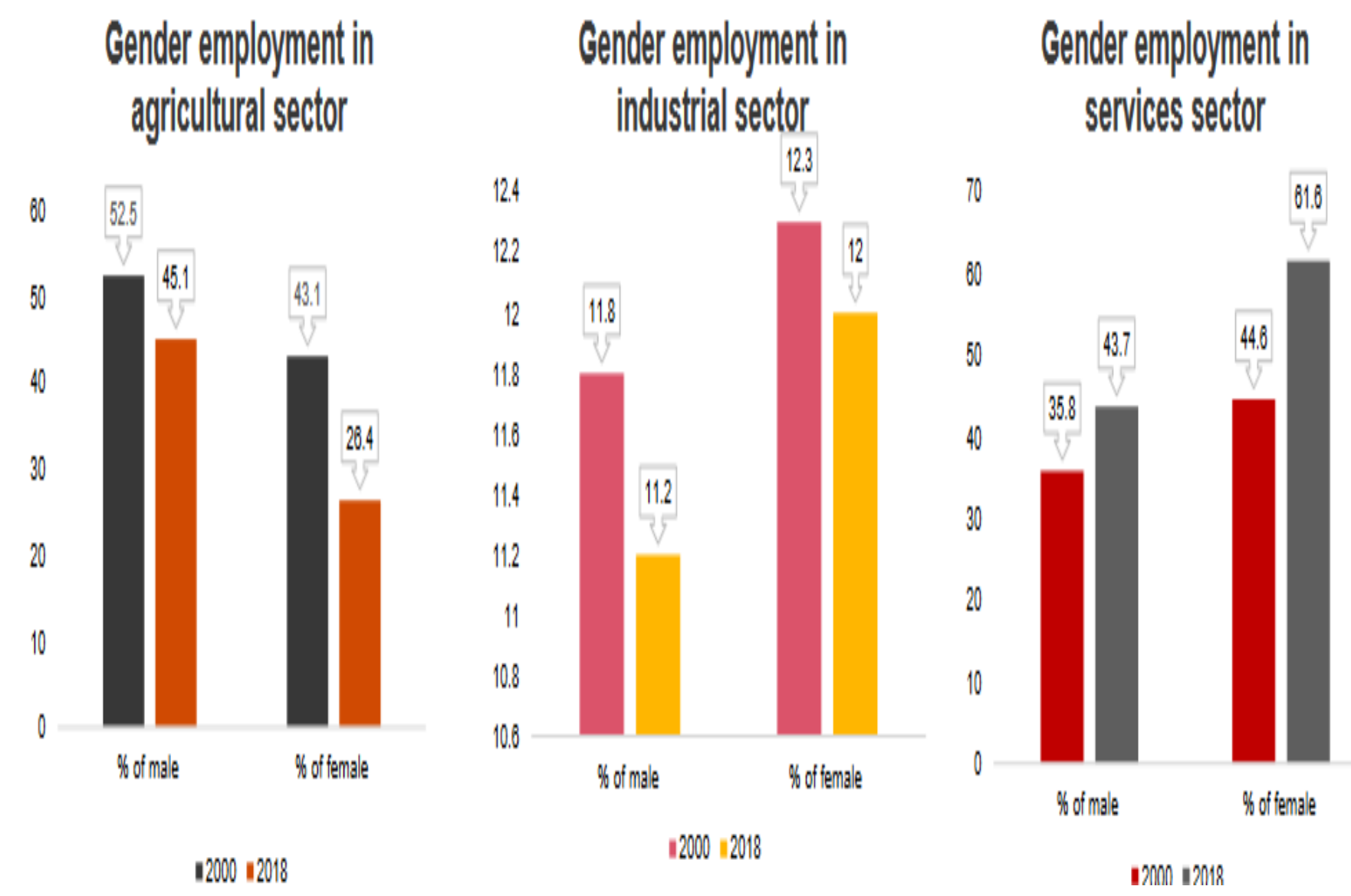


More men than women used a mobile phone or the internet to pay bills in 2021

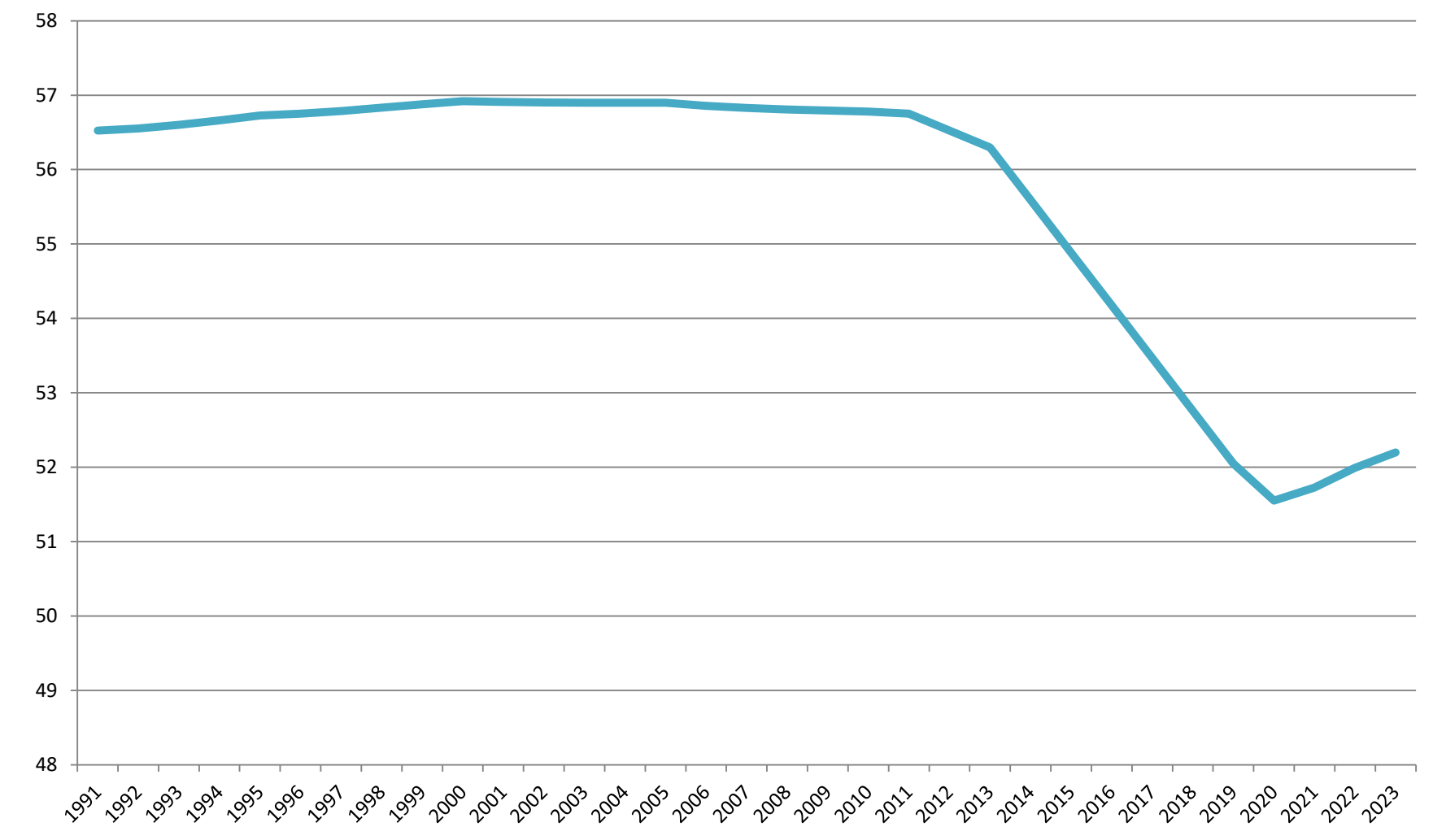
Used a mobile phone or the internet to pay bills in the past year, by sex (% age 15+)



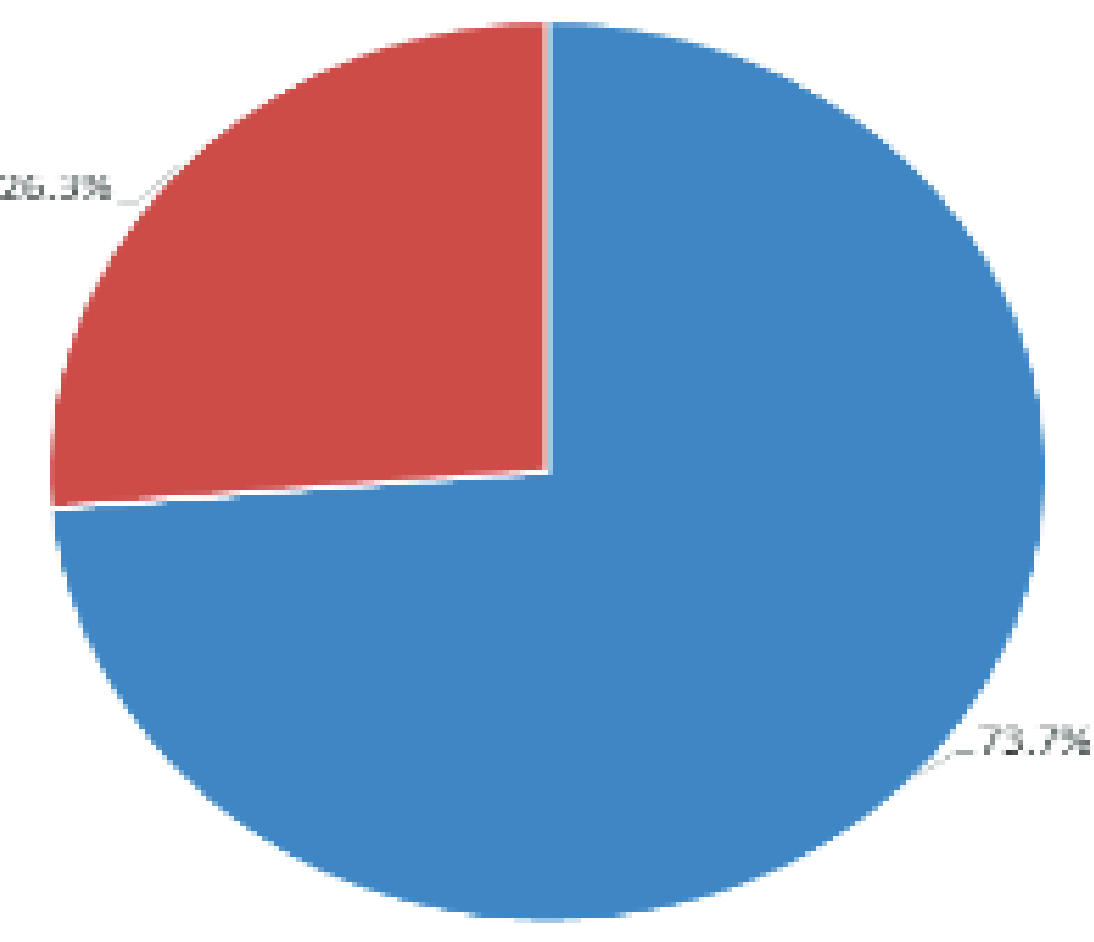
Labor participation rates (male vs. female) in agriculture, industry and services sector (2000 vs 2018)



Labor force participation rate, female (% of female population ages 15+) 1991 - 2023



Shares of Human Capital Wealth, 2018



Nigeria Digital Divide Data

- 92 percent of men own mobile phones, compared to 88 percent of women.¹
- 54 percent of men use mobile internet, compared to 34 percent of women.¹
- Women have less autonomy (62 percent) in paying for and selecting handsets than men (93 percent).¹
- 68 percent of women do not have a smart phone.¹
- 37 percent of adolescent girls own phones compared to approximately 77 percent of boys.
- 42 percent of people in urban areas use the internet, compared to 22 percent in rural areas.

Conclusion

Findings reveal a significant gender disparity in digital literacy rates, with women being markedly underrepresented in technology-driven sectors. This gap translates into broader economic inequalities, affecting employment opportunities and income levels. While Nigeria's tech space is growing, there is considerable room for the growth of Nigerian women in tech. To close the gender gap and foster inclusive growth, it is crucial to implement targeted interventions that promote digital inclusion for women.

References

- Africa-China Reporting Project. (2018). Bridging the gender-based digital gap in Northern Nigeria. Retrieved from <https://africachinareporting.com/bridging-the-gender-based-digital-gap-in-northern-nigeria/>
- Banyan Global. (2022). Understanding the gender digital divide in Nigeria: Learning brief. Retrieved from <https://banyanglobal.com/resource/understanding-the-gender-digital-divide-in-nigeria-learning-brief/>
- GSMA. (2024). *GSMA - Mobile for Development*. Retrieved from <https://www.gsma.com/mobilefordevelopment/>
- International Labor Organization. (2024). *ILOSTAT Database*. Retrieved from <https://ilostat.ilo.org/data/>
- National Bureau of Statistics. (2023). *Statistical report on women and men in Nigeria*.
- ONE Campaign & Center for Global Development. (2020). Gender gap in Nigeria's tech ecosystem. Retrieved from <https://www.one.org/us/2020/10/20/gender-gap-in-nigerias-tech-ecosystem/>
- Onyemachi, F. (2022). Nigerian tech market to continue robust growth in 2022- FBNQuest. Retrieved from <https://businessday.ng/news/article/nigerian-tech-market-to-continue-robust-growth-in-2022-fbnquest/>
- PwC. (2020). *Impact of women on Nigerian economy*.
- Sasu, D. (2024). Literacy rate in Nigeria in 2018, by zone and gender. Retrieved from <https://www.statista.com/statistics/1124745/literacy-rate-in-nigeria-by-zone-and-gender/>
- Tech Herfrica. (2023). Bridging the digital divide: Equipping women in Africa. Retrieved from <https://www.techherfrica.org/bridging-the-digital-divide-equipping-women-in-africa/>
- World Bank Group. (2023). *Gender data: Nigeria*. Retrieved from <https://genderdata.worldbank.org/en/economies/nigeria>
- World Economic Forum. (2023). Here's how technology can help close Nigeria's gender gap. Retrieved from <https://www.weforum.org/agenda/2022/07/technology-nigeria-gender-gap/>

Future Directions

Future research should address the limitations posed by secondary data, which affect the comprehensiveness and depth of the findings due to potential data unavailability and gaps. To gain a more nuanced understanding and validate the results, it is crucial to incorporate primary data collection. Conducting surveys, and interviews targeting women in various technological sectors can provide firsthand insights and enhance the accuracy of the analysis. These primary data collection methods will allow researchers to gather detailed and context-specific information, overcoming the challenges associated with secondary data limitations and unavailability.

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Contact information

Kamal Tasiu Abdullahi, Istanbul University, Department of Economics, kmlts256@gmail.com