

**PERCEIVED IMPACT OF DIGITAL EXCLUSION ON CONSUMERS'
INTENTION TO PURCHASE ONLINE IN ANAMBRA STATE.**

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Abstract

The survey research design study was adopted to examine impact of digital exclusion on consumers' intention to purchase online in Anambra state. Two research questions were raised to guide the study. The population is all the consumers that purchase online in Anambra State. The sample size is 384 determined using the sample size calculator software formula. A researchers' self-developed questionnaire containing 22-items was used to collect data from the respondents. The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was pilot tested using 20 consumers that purchase online in Delta state who were not part of the study population. This was done to ensure the reliability of the instrument and the data collected was analyzed using Cronbachs' Alpha which yielded an overall reliability coefficient of 0.73. Data were analyzed using mean and standard deviation. The findings indicated that accessibility factors as well as affordability factors impacted on consumers' decisions to purchase online. Based on the findings, it was recommended among others that e-commerce platforms should invest in user-friendly website interfaces and mobile applications optimized for low-bandwidth connections.

Keywords: Digital, Exclusion, Digital Exclusion, Consumer, Online Purchase.

Introduction

The growth of e-commerce has revolutionized consumer behavior, transforming traditional shopping patterns into digital transactions. A consumer is an individual or organization that purchases or uses goods or services for personal, family or household purposes. With advancements in technology, increasing internet penetration, and the proliferation of mobile devices, online shopping has become an essential part of modern commerce (Usman & Kumar, 2020; Duong & Liaw, 2021; Abhram, 2022; Zhang & Liu, 2023). Online purchase or online shopping is a form of electronic commerce which allows consumers get full

information about products from their reviews from other past customers. So, consumers are no longer limited to asking friends and families because there are many product reviews on the web which gives opinions of the existing users of the products (Sajannerar, *et al* 2022). Online purchase offers considerable benefits to consumers as they do not have to shop among the crowds, not waiting in the queue and not spending time to go to the physical stores (Ali & Sudan, 2018; Silva *et al*, 2019; Al Asheq *et al*, 2022; Zhang & Liu, 2023). This means that online purchase brings freedom to consumers as they can shop whenever they want to. According to Statista (2023), global e-commerce sales are projected to reach \$6.3 trillion by 2024, underscoring the significant role of online shopping in the global economy.

However, digital exclusion seems to be a significant barrier, hindering many consumers from fully participating in the digital economy. Digital means something related to or characterized by the use of digital technologies like computers, smart phones and the internet while exclusion means being marginalized or denied access to resources, opportunities or social services. Digital exclusion on the other hand refers to the sections of the population not being able to use the internet in ways that are needed to participate fully in the modern society (Ofcom, 2022). It is when people do not have equitable, meaningful and safe access to use, lead and design of digital technologies, services and associated opportunities for everyone everywhere (Holmes & Burgess, 2022). It is the inability or reluctance to access and utilize digital technologies, often due to factors like limited digital literacy, inadequate infrastructure, accessibility and affordability issues. Mee *et al* (2024) explained that Ofcom, the UK communications regulator describes digital exclusion as having three inter-linked dimensions relating to ability, affordability and accessibility.

Accessibility in online shopping refers to the ease with which consumers can access, navigate, and complete transactions on digital platforms, regardless of their

physical abilities, technical expertise, or geographical location (Watts, 2020). It encompasses website usability, mobile optimization, internet availability, and seamless payment systems (Greater Manchester Office of Data Analysis, 2022). Gungaphul and Mangra (2024) reported that research by Forrester Research indicates that 43% of consumers abandon online purchases due to poor website usability and checkout barriers, highlighting the critical role of accessibility in consumer purchase intentions. Furthermore, mobile devices account for over 60% of global online purchases, emphasizing the importance of mobile-friendly platforms in facilitating access (Long, 2023). Hernandez and Faith (2023) noted that in regions with low internet penetration or poor infrastructure, accessibility remains a significant barrier to online shopping adoption. Yaras *et al* (2017) noted that consumers devote less time to shopping and shopping platforms that are easily accessible are becoming important. This means that accessibility is an important factor in consumers' intention to purchase online. E-commerce giants like Amazon and Alibaba have invested heavily in ensuring accessibility through streamlined apps and diverse payment options. In Nigeria, platforms like Jumia and Konga have tailored their systems to accommodate mobile users and local payment methods, significantly increasing their customer base.

On the other hand, affordability is closely linked and is related to the financial cost of accessing the internet or purchasing appropriate devices for access (Mee *et al*, 2024). For this study, affordability extends to the financial feasibility of online purchases, including product pricing, shipping costs, discounts, and overall value for money. Studies have consistently shown that price is a major determinant of online purchase decisions, with over 80% of online shoppers prioritizing price as the key factor influencing their purchases (Rangaswamy, *et al* 2022; Gungaphul & Mangra, 2024). Platforms that offer transparency in pricing, flexible payment options, and competitive discounts often experience higher sales conversion rates.

For instance, Baymard Institute found that 48% of online shoppers abandon their carts due to high additional costs such as shipping fees and taxes. Additionally, promotional events such as Black Friday and Cyber Monday have demonstrated the power of affordability in driving consumer behavior, with 64% of consumers waiting for discounts before making significant online purchases. In Nigeria, e-commerce platforms like Jumia have introduced flexible payment options and regional partnerships to reduce costs and improve affordability for consumers. Globally, Amazon's Prime Membership reduces shipping costs, making online purchases more affordable and convenient.

The interplay between accessibility and affordability is particularly significant in developing economies like Nigeria, where both factors are intertwined with socio-economic conditions. E-commerce platforms such as Jumia and Konga have tailored their services to address these challenges by offering mobile-optimized platforms, regional payment options, and strategic partnerships with logistics providers to reduce costs. Furthermore, innovative financial models such as Buy Now, Pay Later (BNPL) have been introduced to make online purchases more affordable for low-income earners.

In Anambra State, Nigeria, digital exclusion poses significant challenges, particularly among rural and low-income populations. The state's economic growth and development depend on bridging this digital divide. Accessibility ensures that consumers can seamlessly navigate and complete purchases, affordability determines whether they can make those purchases in the first place. Both factors are not isolated but rather complementary, creating a holistic e-commerce experience that influences purchase intentions. This study seeks to examine the impact of digital exclusion on consumer intention to purchase online examining the impact of accessibility and affordability on consumers' intentions to purchase online.

Statement of the Problem

In an ideal digital economy, accessibility and affordability of digital technologies are fundamental drivers of online consumer behavior. Consumers should have seamless access to reliable internet services, digital devices, and user-friendly platforms to facilitate online purchases. Additionally, affordability ensures that digital tools and services are within the financial reach of individuals, enabling inclusive participation in the digital marketplace. When these two factors align, businesses experience increased market reach, consumers enjoy convenience and efficiency, and the overall economy thrives through enhanced e-commerce activities. Developed regions have leveraged digital accessibility and affordability to drive consumer trust, increase transaction volumes, and promote sustainable economic growth.

However, the current reality in Anambra State seems to have significant challenges in both digital accessibility and affordability. Despite the increasing penetration of internet services and mobile technologies, a considerable portion of the population remains digitally excluded due to poor infrastructure, high data costs, and limited access to affordable digital devices. Many consumers, particularly those in rural and underserved areas, may be finding it difficult to access reliable internet services or afford digital tools essential for online transactions. Furthermore, digital literacy gaps exacerbate the problem, as consumers who lack the skills to navigate digital platforms are unable to take full advantage of online purchasing opportunities.

The consequences of this digital exclusion seems far-reaching. Businesses operating in the digital marketplace experience reduced customer engagement, limited market reach, and slower revenue growth. Consumers, on the other hand, are deprived of the convenience, variety, and competitive pricing that online platforms offer. This gap underscores the urgent need to understand the specific

impact of accessibility and affordability on consumer intention to purchase online in Anambra State. Addressing this gap will not only enhance digital inclusion but also foster economic growth, improve consumer experiences, and drive sustainable digital entrepreneurship in the region. This study, therefore, aims to bridge this knowledge gap by examining the extent to which accessibility and affordability influence consumer intention to engage in online purchases in Anambra State.

Research Objectives

The main objective of the study is to determine the impact of digital exclusion on consumer intention to purchase online in Anambra state. Specifically, the study sought to identify the perceived impact of:

1. Accessibility on consumer intention to purchase online in Anambra state.
2. Affordability on consumer intention to purchase online in Anambra state.

Research Questions

The following questions guided the study:

1. What are the perceived impacts of accessibility on consumers' intention to purchase online in Anambra state?
2. What are the perceived impacts of affordability on consumers' intention to purchase online in Anambra state?

Research Method

A descriptive survey design was adopted for the study. The population of this study involved all the consumers that purchase online in Anambra state. The sample size is 384. Since the population of the consumers that purchase online in Anambra state is infinite, sample size calculator software formula was used. Purposive random sampling was used to draw the respondents. A researchers' self-developed questionnaire titled: Digital Entrepreneurship and Job Creation Questionnaire (DEJCQ) was used for data collection. The questionnaire was made up of 24 items and was divided into two: Part 1 and Part 2. Part 1 with 14 items to

elicit information on impacts of accessibility on consumers' intention to purchase online and Part 2 has 10 items which covered impacts of affordability on consumers' intention to purchase online. The instrument was validated by three experts from the Faculty of Education, NnamdiAzikiwe University, Awka. The instrument was pilot tested using 20 consumers that purchase online in Delta state who were not part of the study population. This was done to ensure the reliability of the instrument and the data collected was analyzed using Cronbachs' Alpha. Overall reliability coefficient of 0.73 was obtained and was considered to be acceptable for the study. The questionnaire was administered by the researchers using direct administration method. Out of the 384 copies of the questionnaire administered only 379 copies were used for analysis representing about 98.70% return rate. The other 5 copies were either not duly filled or not retrieved.

The data obtained were analyzed using mean based on the 4-point scale ranging from very high extent of 4 points to very low extent of 1 point. Any item with a mean response of 2.50 and above was considered 'agreed' while items with a mean response below 2.50 was considered 'disagreed'.

Results

Research Question One: What are the perceived impacts of accessibility on consumers' intention to purchase online in Anambra state?

Table 1: Mean Responses of Respondents on Perceived Impacts of Accessibility on Consumers' Intention to Purchase Online in Anambra State

S/N	ITEMS	Mean	SD	Remark
1	A website interface that is not user-friendly discourages consumers to make online purchases.	3.71	.60	Agreed
2	Unclear product descriptions and images affect consumers intention to purchase online.	3.62	.88	Agreed
3	Lack of mobile app with a seamless shopping experience decreases consumers willingness to buy products online.	3.53	.70	Agreed

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4	Slow website/app loading discourages consumers from completing online purchases.	2.64	1.06	Agreed
5	Delayed responds of online platform to consumers actions affects intention to purchase.	3.73	0.62	Agreed
6	Unavailability of multiple payment methods (e.g., mobile money, bank transfer, card payment) influences consumers online shopping decisions.	2.53	1.10	Agreed
7	Rigorous payment process encourages consumers to purchase products online.	2.53	0.91	Agreed
8	Unstable internet connectivity influences consumers intention to shop online.	3.62	0.49	Agreed
9	High data consumption during online shopping discourages consumers from completing purchases.	3.24	0.61	Agreed
10	Limited delivery coverage discourages consumers from making purchases online.	3.48	0.73	Agreed
11	Limited access to customer support services (e.g., chatbots, helplines) discourages consumers from shopping online.	3.19	0.73	Agreed
12	Ineffective search and filtering tools make it difficult for consumers to find products, decreasing their intention to buy.	3.52	0.66	Agreed
13	Poor product categorization discourages consumers from completing online purchases.	3.28	0.76	Agreed
14	Presence of features like text-to-speech, adjustable fonts, and screen readers improve consumers' ability to shop online.	3.09	0.65	Agreed
Cluster mean		3.41	.88	Agreed

The analysis in Table 1 shows the cluster mean and standard deviation of 3.41 and .88 indicating the items impacts on consumers' intention to purchase online in Anambra state. The analysis of items indicates that all the fourteen items were rated as impacts of accessibility on consumers' intention to purchase online in Anambra state.

Research Question Two What are the perceived impacts of affordability on consumers' intention to purchase online in Anambra state?

Table 2: Mean Responses of Respondents on the Perceived Impacts of Affordability on Consumers' Intention to Purchase Online in Anambra State

S/N	ITEMS	Mean	SD	Remark
1	Competitive product prices influence consumers' decision to purchase online.	2.95	0.71	Agreed
2	High product prices discourage consumers' from making online purchases.	3.13	0.62	Agreed
3	Absence of discounts reduces consumers' interest in shopping online.	3.12	0.53	Agreed
4	High delivery fees discourage me from completing online purchases.	3.02	0.77	Agreed
5	Not giving clear information about shipping costs discourages Online purchase decisions.	3.02	0.57	Agreed
6	Lack of installment payment options decrease consumers intention to purchase online.	3.31	0.78	Agreed
7	Unavailability of multiple payment options (e.g., credit cards, digital wallets) affects consumers' buying decisions.	3.59	0.70	Agreed
8	Additional charges discourage consumers from completing an online purchase.	3.52	0.79	Agreed
9	Less quality of the product relative to its price decrease consumers' decision to buy online.	3.33	0.78	Agreed
10	High cost of internet data decrease consumer intentions to purchase shop online.	3.33	0.77	Agreed
Cluster mean		3.02	0.77	Agreed

Results in Table 2 show the environmental skills required of engineers to become entrepreneurs for sustainable development in Anambra state. The cluster mean and standard deviation of 3.02 and .77 indicates that respondents agreed that all those items are the environmental skills required of engineers to become entrepreneurs for sustainable development in Anambra state.

Discussion of Findings

The findings from research question one reveal that accessibility influences consumers' intention to purchase online in Anambra State. Respondents agreed that poor website usability, unclear product descriptions, and lack of seamless mobile applications reduce their willingness to shop online. This aligns with Gungaphul and Mangra (2024), who emphasized that poor website usability and checkout barriers contribute to high cart abandonment rates. Furthermore, unstable internet connectivity, slow-loading websites, and high data consumption were highlighted as critical factors deterring consumers from completing online transactions. Hernandez and Faith (2023) also noted similar challenges, particularly in regions with poor infrastructure. Additionally, limited payment options, lack of customer support, and inadequate search and filtering tools were identified as barriers to seamless online shopping. These findings suggest that accessibility encompasses not just internet availability but also platform usability, payment flexibility, and customer support systems, all of which are essential for enhancing online purchase intentions. In regions like Anambra State, where technological infrastructure is still developing, addressing these barriers is critical to fostering e-commerce adoption.

The results from research question two indicate that affordability impacts on consumers' online purchase decisions in Anambra State. Respondents agreed that high product prices, absence of discounts, and unclear shipping cost information discourage online purchases. This finding is consistent with Rangaswamy *et al.* (2022), who emphasized that price remains one of the most significant determinants of online shopping behavior. Furthermore, additional charges such as delivery fees and taxes were seen as major deterrents to completing transactions. The study also revealed that flexible payment options, including installment plans and multiple payment gateways, significantly influence purchase intentions. Platforms like Jumia and Konga have made strides in addressing affordability

barriers through regional partnerships and flexible payment models. However, the findings suggest that affordability challenges are deeply tied to Nigeria's socio-economic landscape, where disposable income levels remain relatively low. Thus, affordability must be addressed holistically, integrating pricing strategies, promotional campaigns, and user-centric financial models.

Conclusion

This study examined the impact of digital exclusion determining consumers' intentions to purchase online in Anambra State. Accessibility factors, including website usability, mobile optimization, internet connectivity, and customer support, play a vital role in ensuring seamless online shopping experiences. Similarly, affordability factors, such as competitive pricing, transparent shipping costs, and flexible payment options, are pivotal in influencing consumers' decisions to shop online. Bridging the digital divide in Anambra State is not only essential for fostering consumer participation in e-commerce but also for driving broader economic growth.

Recommendations

Based on the findings of the study, the following were recommended:

1. E-commerce platforms should invest in user-friendly website interfaces and mobile applications optimized for low-bandwidth connections.
2. Online retailers should adopt transparent pricing models, including clear information about shipping costs and additional fees to enhance affordability to boost online purchase intention

References

- Abhram, W. (2022). Internet as a modern day communication medium. *Journal of Mass Communication and Journalism*, 12(3), 453 - 463
- Al Asheq, A., Tanchi, K. R., Akhter, S., Kamruzzaman, M., & Islam, A. (2022). Examining university students behaviour towards online shopping: An

empirical investigation in an emerging market. *Innovative Marketing*, 18(1), 94 -103

Ali, S. W. & Sudan, S. (2018). Influence of cultural factors on impulsive buying tendency: A study of Indian consumers. *Vision*, 22(1), 68-77

Duong, X. L. & Liaw, S. Y. (2021). Psychometric evaluation of online shopping addition scale. *Journal of Human Behaviour in the Social Environment*, 32(3), 402-414

Greater Manchester Office of Data Analytics (2022). Digital exclusion risk index (DERI). Greater Manchester Combined Authority

Gungaphul, M. & Mangra, M. (2024). Factors influencing buying intentions of university students in Mauritius towards online shopping. *Marketing and Branding Research*, 11(1), 12-26

Hernandez, K. & Faith, B. (2023). Online but still falling behind: Measuring barriers to internet use “after access”. Retrieved from <https://doi.org/10.1177/0042098009104566>

Holmes, H. & Burgess, G. (2022). Digital exclusion and poverty in the UK: How structural inequality shapes experiences of getting online. Retrieved from <https://doi.org/10.1016/j.diggeo.2022.100041>

Long, B. (2025). Factors influencing consumer intentions towards online food purchasing in Phnom Penh. *Asian Journal of Economics, Business and Accounting*, 23(17), 81-89

Mee, P., Gussy, M., Huntley, P., Kenny, A., Jarrat, T., Kenward, N., Ward, D., & Vaughan, A. (2024). Digital exclusion as a barrier to accessing healthcare: A summary composite indicator and online tool to explore and quantify local difference in levels of exclusion. Retrieved from <https://doi.org/10.1007/s10209-024-011048-5>

- Rangaswamy, E., Nawaz, N., & Changzhuang, Z. (2022). The impact of digital technology on changing consumer behaviours. *Humanities and Social Science Communications*, 9(1), 1-10
- Sajannerar, S., Dharward, J., & Tandale, P. G. (2022). Online shopping – an overview. *International Journal of Computer Engineering and Applications*, 14(12), 51-56
- Silva, J., Pinho, J. C., Soares, A., & S'a, E. (2019). Antecedents of online purchase intention and behaviour: Uncovering unobserved heterogeneity. *Journal of Business, Economics and Management*, 20(1), 131-148
- Usman, M. U., & Kumar, P. (2020). Factors influencing consumer intention to shop online in Nigeria: A conceptual study. *Journal of Business Perspective*, 25(4), 45-55
- Watts, G. (2020). COVID 19 and the digital divide in the UK. Retrieved from [https://doi.org/10.1016/s2589-7500\(20\)30169-2](https://doi.org/10.1016/s2589-7500(20)30169-2)
- Yaras, E., Ozbuk, M. Y., & Unal, D. A. (2017). Factors affecting consumers' intention to purchase online. *Journal of Internet Applications and Management*, 8(2), 63-74
- Zhang, W. & Liu, X. (2023). The impact of internet on innovation of manufacturing export enterprises: Internal mechanism and micro evidence. *Journal of Innovation and Knowledge*, 8(3), 56-68