

MOBILE ORDERING ADOPTION AND EATERIES PERFORMANCE IN ASABA, DELTA STATE

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ABSTRACT

This study investigated the links between mobile ordering adoption and eateries performance in Asaba, Delta State. The specific objectives were to evaluate the interplay between mobile ordering adoption, operational efficiency and customer satisfaction. Data for the study was collected through the use of a structured questionnaire. The data was analysed and the hypotheses were tested using Spearman's Rank Correlation Coefficient. The findings revealed that, mobile ordering adoption is significantly link with operational efficiency and customer satisfaction in Asaba, Delta State. The study thus concluded that, there is a significant association between mobile ordering adoption and eateries performance in Asaba, Delta State. Based on the conclusion, the study recommended that, eateries in Asaba should adopt mobile ordering to improve performance in terms of operational efficiency and customer satisfaction

Keywords: Mobile Ordering Adoption, Eateries Performance, Operational Efficiency, Customer Satisfaction.

INTRODUCTION

Urbanization, population growth, and evolving consumer tastes and preferences have all contributed to the notable expansion of eateries in Asaba, Delta State. However, the conventional approaches to ordering meals, which rely on phone calls or walk-ins, sometimes result in inefficiencies including lengthy wait times, inaccurate orders, and little convenience for patrons. These challenges have a direct impact on customer satisfaction, operational efficiency, and overall performance of the eateries.

Mobile ordering apps have emerged as a potential solution to these issues, offering the convenience of remote ordering, real-time updates, and streamlined payment processes as empirically proven by scholars in different places. For instance, Li and Kimes (2019) analyzed the effect of mobile ordering adoption on sales performance in U.S. fast-food restaurants and found that those that implemented mobile ordering systems experienced a 15-20% increase in sales within the first year, with an even greater increase (up to 25%) among those that actively promoted their mobile platforms. Park and Kim (2020) examined the role of mobile loyalty programs integrated into ordering apps in South Korean fast-food chains and found that a 12% increase in repeat business resulted in a 7% increase in revenue. McCarthy and Doyle (2019) looked at how Irish fast-food restaurants' operational efficiency was impacted by mobile ordering. According to the study, mobile orders helped kitchen employees prepare meals more methodically, which decreased in-store traffic and increased order accuracy by 12%. In-store customers' wait times were shortened by 15% as a result.

Despite the growing adoption of mobile technology globally, the extent to which mobile ordering influences the operational efficiency and customer satisfaction of eateries in Asaba remains unclear. This study aims to address this gap by investigating the interplay between mobile ordering adoption and the performance of eateries in Asaba, Delta State. It will explore how the integration of mobile technology influences customer satisfaction and operational efficiency, as

well as identify the challenges faced by both eateries and customers in implementing these systems. By doing so, it seeks to provide insights that can guide the optimization of mobile ordering solutions for the local context.

LITERATURE REVIEW

Theoretical Foundation

This study is built on the Technology Acceptance Model (TAM).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), created by Davies in 1989, offers a concise explanation of why users want to embrace new technology. A person or an organization could be the user (Subhadin, 2017). The two primary components of the original TAM were "perceived usefulness" and "perceived ease of use" (Davis, 1989, cited in Wilson, 2016). According to Wilson (2016), there is a connection between these two factors and people' opinions about new technologies, as well as whether they ultimately adopt or reject them. According to Davis (1989), perceived usefulness is "the extent to which an individual or organization believes that utilizing a specific system would improve his or her job performance." According to Davis, as mentioned by Idenedo and Asiagwu (2024), a system with a high perceived usefulness is seen to have a beneficial influence on the adoption of that system. In the words of Wilson (2020), Davis (1989) defined perceived ease of use as "the degree to which a person or organization believes that using a particular system would be free of effort."

Several restaurants have adopted mobile ordering due to its perceived ease of use and usefulness, which enables them to retain current customers, attract new ones, and improve customer satisfaction and operational efficiency through enhanced interaction and communication (Hady, 2013; Didia & Otite, 2017; Idenedo & Asiagwu, 2024). This study has established that eateries in Asaba can improve customer satisfaction and operational efficiency by adopting mobile ordering of food considering the perceived ease of use and usefulness.

This study is built on the assumption conceptualized below.

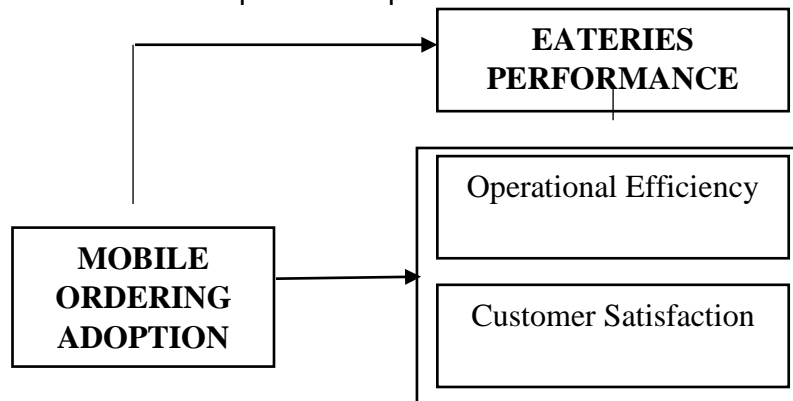


Figure 1: Conceptual Framework of Mobile Ordering Adoption and Eateries Performance.

Source: Desk Review, 2024.

Mobile Ordering Adoption

A mobile food ordering app is a platform that allows users to browse, select, and order food from local restaurants using their smartphones. These apps streamline the ordering process, making it convenient for users to access menus, customize their orders, and make payments, and track delivery or pick-up status in real-time (Idenedo & Asiagwu, 2024). Mobile food ordering apps have become popular due to their ease of use, variety of choices, and seamless integration with

payment and delivery systems (Idenedo & Poi, 2020). A well-designed mobile food ordering app enhances the convenience of ordering food and supports restaurants in reaching more customers, driving sales, and improving customer retention (Park & Kim, 2020). Through mobile devices, mobile apps, and mobile web browsing technologies, businesses can use mobile ordering as an aspect of mobile marketing to provide online customers with pertinent information about their offerings on a personalized and interactive basis (Hopkins & Turner, 2012). Besides, mobile ordering makes the ordering process easier and faster for customers, reducing wait times and increasing satisfaction. Eateries can manage orders more effectively, reducing the burden on in-store staff and minimizing errors associated with manual ordering (McCarthy & Doyle (2019). Mobile ordering platforms enable restaurants to collect valuable customer data for personalized marketing, inventory management, and demand forecasting (Amirkhanpour et al., 2014; Idenedo et al., 2020).

Eateries Performance

Performance, as defined by Nakasango et al. (2023), is the degree to which an organization accomplishes its goals and objectives; it is commonly quantified in terms of organizational, financial, and strategic results. In Barani's (2019) view, it is an evaluation of how well a business generates profit, manages resources effectively, and maintains development and innovation. Performance is the accomplishment of particular objectives as judged by pre-established criteria, according to Richard (2019). Performance can be evaluated in two directions or dimensions (Bhatti et al., 2023). Performance can be evaluated from an objective standpoint using monetary and market-based indicators including capacity utilization, profitability, and market share. The second type of performance evaluation, called subjective performance, takes into account staff and customer-based metrics including service quality and satisfaction. The latter measures crucial conditions for profitability and suggests that, for a business to achieve successful objective performance, special attention must be paid to the service quality offered, as well as to both customer and employee satisfaction (Bhatti, et al., 2023). Considering eateries where this study is domiciled, performance is defined as how well eateries achieve their goals and objectives, typically measured in terms of operational efficiency and customer satisfaction.

Operational Efficiency: The strategies and tactics used to provide clients with high-quality goods and services in a timely and economical manner are all included in operational efficiency (Neil, 2019). Production, distribution, inventory management, and asset usage are frequently cited by researchers as crucial components of operational efficiency. According to Ghosh and Sanyal (2019), this idea also describes an organization's capacity to exceed consumer expectations by minimizing waste and maximizing resource use. According to Neil (2019), operational efficiency refers to the several methods and approaches used to provide clients with high-quality products and services in an economical and effective manner. In a similar vein, Kalluru and Bhat (2009) described it as an organization's capacity to improve resource utilization and minimize waste while providing clients with high-quality goods and services.

Customer Satisfaction: The desire to satisfy customers stems from the fact that customer satisfaction determines the survival of an organization and failure to satisfy customers could ruin a business dream. Every organization wants to satisfy its customers since it is the only way to retain them and maximize profit. Customer satisfaction holds the potential for increasing an organization's customer base and reputation (Fornell in Oyeniya & Joachim, 2018). It is the only way to retain customers and attract new ones to the firm. As Christensen (2016) rightly stated, a company that satisfies its customers stands the chance of sustaining its customer base, attracting new customers to the firm, and improving its market competitiveness.

Customer satisfaction is crucial for the existence and survival of any fast-food company. Oliver (2016) defined customer satisfaction as the fulfilment of needs as described by the customer. Chang and Fong (2020) defined customer satisfaction as a post-choice evaluative judgment of a specific purchase occasion. Oliver in Chang and Fong (2020) described customer satisfaction as the overall evaluation based on the overall experience with the goods and services of a particular firm over time. Customer satisfaction can be viewed as an outcome and a process. As an outcome, it involves the experience derived from the consumption of a product or usage of a service; and as a process, it entails the result of psychological and perceptual evaluation of a product or service (Jones & Suh, 2020).

Mobile Ordering and Eateries Performance

A study by Li and Kimes (2019) examined the impact of mobile ordering adoption on sales performance in U.S. fast-food restaurants. Restaurants that implemented mobile ordering systems saw a 15-20% increase in sales within the first year, with an even greater increase (up to 25%) among restaurants that actively promoted their mobile platforms. Upselling opportunities through targeted recommendations boosted average order values.

Park and Kim (2020) analyzed the role of mobile loyalty programs integrated into ordering apps in South Korean fast-food chains. Fast-food chains that integrated loyalty rewards into their mobile apps reported a 12% increase in repeat purchases, leading to a 7% boost in revenue. Mobile-based loyalty programs encouraged repeat visits and larger order sizes.

McCarthy and Doyle (2019) examined how mobile ordering affected operational efficiency in Irish fast-food restaurants. Mobile orders allowed kitchen staff to prepare meals more systematically, reducing in-store congestion and improving order accuracy by 12%. This led to a 15% reduction in wait times for in-store customers.

An analysis by Wilson and Peters (2021) of mobile ordering data in Australian fast-food restaurants focused on customer behaviour and targeted marketing. Mobile data allowed restaurants to tailor marketing campaigns to individual preferences, leading to a 10% increase in conversion rates for promotions sent through mobile apps. Data-driven insights also helped optimize inventory, reducing waste by 8%.

Based on the empirical literature reviewed, the current study hypothesises that,

Ho1: Mobile ordering has no significant link with the operational efficiency of eateries in Asaba.

Ho2: Mobile ordering has no significant association with customer satisfaction of eateries in Asaba.

THE STUDY

This study adopted a cross-sectional survey research design. The study population consists of thirty-one (31) registered eateries listed in the Delta State Ministry of Commerce and Industry, Asaba, as well as those registered with the Association of Fast Food and Confectionary of Nigeria (AFCON) Delta State Chapter. Given that the study population is a flow population, Osuala (2001) assert that, except when a complete census is taken, research is almost invariably conducted using the sample, by which generalization applies to the population from which the sample was obtained. However, Baridam (2001) states that there is no best method of drawing a sample from the population of interest, the nature and purpose of the study should determine the sampling method to be used. Therefore, a census was taken for the current study. Three (3) staff consisting of the operational manager, marketing manager and general manager of each of the thirty-one eateries formed the study's sample unit, thereby making a total of ninety-three (93) respondents that participated in this study. A structured questionnaire was used to collect data from the sampled staff. The data was analyzed and the hypotheses were tested using the Spearman Rank Correlation Coefficient with the assistance of SPSS version 22.

RESULTS**Table 1: Questionnaire Analysis**

Numbers	Questionnaire	Percent
No. Sent out	93	100.0
No. Returned	90	96.8
No. Not Returned	3	03.2

Source: Field Survey Data 2024

Table 1 shows that a total of 93 copies of the questionnaire were distributed, out of which 90 representing (96.8%) were retrieved while 3 representing (3.2%) were not retrieved. However, 90 representing (96.8%) of the retrieved questionnaires were useful. The 3(3.2%) of the not retrieved questionnaires were not correctly filled and were consequently discarded.

Having analyzed the questionnaire, the various hypotheses proposed for this study were subjected to statistical tests using Spearman's Rank Order Correlation Co-Efficient Statistical Tool.

Table 2: Description of the Degree of Association between Variables

Correlation Coefficient (r)	Description/Interpretation
± 0.80 – 1.0	Very Strong
± 0.60 – 0.79	Strong
± 0.40 – 0.59	Moderate
± 0.20 – 0.39	Weak
± 0.00 – 0.19	Very Weak

Source: SPSS Output of Data Analysis of Mobile Ordering Adoption and Eateries Performance (2024).

The positive (+) sign in the value of r indicates a direct/positive relationship while the negative (-) sign in the value of r indicates an indirect/negative or inverse relationship. Therefore, the sign of the r-value explains the direction of association or nature of the relationship between the variables.

Decision Rule

Reject the null hypothesis (H₀) if PV < 0.05 for the 2-tailed test and conclude that a significant relationship exists.

Table 3: Correlation Analysis of Mobile Ordering Adoption and Operational Efficiency Correlations

			Mobile Adoption	OrderingOperational Efficiency
Spearman's rho	Mobile	Correlation Coefficient	1.000	.722**
	Ordering	Sig. (2-tailed)	.	.000
	Adoption	N	90	90
Operational Efficiency	Operational	Correlation Coefficient	.722**	1.000
	Efficiency	Sig. (2-tailed)	.000	.
		N	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output of Data Analysis of Mobile Ordering Adoption and Eateries Performance (2024).

According to Table 3 above, the Spearman's correlation coefficient (r) for the association between operational efficiency and the adoption of mobile ordering is 0.722**. This value is high and suggests that there is a strong relationship between the variables. The correlation coefficient's positive sign indicates that the variables have a positive association. This means that the use of mobile ordering apps in restaurant operations is linked to a higher level of operational efficiency.

Table 3 indicates that the probability value is (0.000) < (0.05) level of significance. Accordingly, the researcher rejects the null hypothesis and comes to the conclusion that there is a significant relationship between the operational efficiency of Asaba restaurants and the use of mobile ordering.

Table 4: Correlation Analysis of Mobile Ordering Adoption and Customer Satisfaction Correlations

			Mobile Ordering Adoption	Customer Satisfaction
Spearman's rho	Mobile Ordering Adoption	Correlation Coefficient	1.000	.792**
		Sig. (2-tailed)	.	.000
		N	90	90
	Customer Satisfaction	Correlation Coefficient	.792**	1.000
		Sig. (2-tailed)	.000	.
		N	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output of Data Analysis of Mobile Ordering Adoption and Eateries Performance (2024)

Table 4 established Spearman's correlation coefficient on the association between mobile ordering adoption and eateries' performance. The (r) value (0.792**) is high, this indicates that a strong relationship exists between the variables. The positive sign of the correlation coefficient shows that the relationship between the variables is positive. Therefore, increased customer satisfaction is associated with the eateries' level of mobile ordering adoption. The probability value is (0.000) < (0.05) level of significance; hence the researcher rejects the null hypothesis and concludes that there is a significant association between mobile ordering adoption and eateries' performance in Asaba.

Discussion of Findings

The tested hypotheses revealed a significant association between mobile ordering adoption and eateries' performance. As exhibited in Table 3 above, the Spearman's correlation coefficient (r) for the interplay between mobile ordering adoption and operational efficiency is 0.722**. This value is high and suggests that there is a strong association between the variables. The correlation coefficient's positive sign indicates that there is a positive association between the variables. Therefore, the use of mobile ordering apps in restaurant operations is linked to an increase in the operational efficiency of the establishments. Also, Table 4 established Spearman's correlation coefficient for the association between mobile ordering adoption and eateries performance. The (r) value is 0.792**, which indicates that a strong relationship exists between the variables. The positive sign of the correlation coefficient shows that the relationship between the variables is positive. Therefore, increased customer satisfaction is associated with the eateries' level of mobile ordering adoption. These results support earlier research on the use of mobile ordering. Li and Kimes (2019), for example, looked into how the use of mobile ordering affected fast-food businesses' sales performance in the United States.

According to their research, restaurants who used mobile ordering systems experienced a sales rise of 15–

25% in the first year. Those that actively advertised their mobile platforms saw an even higher increase of up to 25%. South Korean fast-food companies' use of mobile loyalty programs incorporated into ordering applications was examined by Park and Kim (2020). According to the survey, fast-food restaurants that included loyalty awards in their mobile apps saw a 12% rise in repeat business, which translated into a 7% gain in sales. McCarthy and Doyle (2019) looked at how Irish fast-food restaurants' operational efficiency was impacted by smartphone ordering. It

was discovered that using mobile orders helped kitchen employees prepare food more methodically, which decreased in-store traffic and increased order accuracy by 12%. In-store customers' wait times were shortened by 15% as a result.

CONCLUSION(S) AND RECOMMENDATIONS

Premised on the findings, the study, therefore, concludes that there is a significant link between mobile ordering adoption and eateries' performance. Also, there is a positive and significant association between mobile ordering adoption, operational efficiency and customer satisfaction. As such, the study recommends that eateries in Asaba should adopt mobile ordering to improve performance in terms of operational efficiency and customer satisfaction.

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