Business Innovation and Organizational Performance of the Fast-Food Industry in Cross River State, Nigeria

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Abstract
Innovation has become the lifeblood of competitive advantage in the global business environment, especially within the fast-food industry, where customer preferences, technology, and service expectations evolve rapidly. This study investigates the relationship between business innovation—specifically product, service, and distribution innovations—and organizational performance among fast-food firms in Cross River State, Nigeria. Anchored on Rogers' Diffusion of Innovations Theory and Herzberg's Motivation–Hygiene Theory, the study adopts a cross-sectional survey design with a sample of 200 respondents drawn from selected fast-food outlets. A structured questionnaire, utilizing a five-point Likert scale, was employed to collect data on innovation dimensions and firm performance. Descriptive statistics, Pearson correlations, and multiple linear regression were employed to test the hypothesized relationships. Results indicate that product, service, and distribution innovations each have significant positive effects on organizational performance ($R^2 = 0.354$, $p < .001$), with product innovation emerging as the strongest predictor. The findings suggest that firms that emphasize innovation in product development, service delivery, and distribution logistics achieve higher operational efficiency, customer satisfaction, and profitability. The study contributes theoretically by integrating innovation diffusion frameworks with organizational performance outcomes, and practically by offering insights for managers seeking to foster innovation-oriented cultures.

Keywords: Business innovation, organizational performance; Fast-food industry; Cross River State

Introduction
Innovation is universally recognized as a cornerstone of organizational competitiveness, adaptability, and long-term success. Organizational survival in competitive markets depends on the capacity to innovate. Firms that fail to adapt to shifting consumer demands and technological change risk losing market relevance (Rahman, 2023). In the fast-food industry, innovation encompasses creative strategies in product design, service delivery, and distribution that enhance customer value and differentiate brands in competitive markets (Hameed, 2021).

Innovation—broadly defined as the creation or improvement of products, services, and processes—remains central to sustaining competitive advantage across industries.

Product innovation refers to the introduction of new or significantly improved goods or services that increase value to customers (Hameed, 2021). In fast-food contexts, product innovation commonly includes the development of novel menu items, healthier food options, and localized dishes that cater to evolving consumer tastes. Empirical studies demonstrate that product innovation enhances customer satisfaction, market share, and revenue growth in fast-food and related industries (Batat, 2022; Eneh & Chukwu, 2023).

Service innovation encompasses new or improved methods of service delivery, customer interaction, and organizational processes that enhance perceived service quality (Gallouj & Savona, 2021). Within the fast-food industry, examples include mobile ordering, self-service kiosks, digital loyalty programs, and contactless payment systems (Chen *et al*., 2022). Digital technologies are reshaping how food is ordered, prepared, and delivered. In this environment, firms that invest in product development, service redesign, and distribution efficiency tend to outperform those that do not (Hameed, 2021; Batat, 2022). Research indicates that service innovations can significantly boost operational efficiency and customer loyalty. Kuo and Tsai (2022) found that automation in service delivery reduces wait times and increases customer satisfaction. Similarly, studies in Nigeria report that digital service enhancements correlate with improved sales and repeat patronage (Ojo & Adeoye, 2023; Nwokah & Ede, 2021). Service innovation is also contingent upon employee capability and managerial support, suggesting a complementary role for human resource development in innovation strategies (Ali & Park, 2021).

Distribution innovation involves novel mechanisms for delivering products to consumers, including logistics, partnerships with delivery platforms, and technology-enabled order fulfillment (Adeigbe *et al*., 2015). For the fast-food sector, efficient distribution systems are critical to meeting customer expectations around speed, convenience, and food quality.

In Nigeria, the fast-food industry has grown significantly, spurred by urbanization, income growth, and shifting consumption patterns. Urbanization, income growth, and changing dietary habits have driven demand for quick-service restaurants (Adefulu *et al.*, 2021). The sector contributes an estimated ₦230 billion annually to the economy (The Guardian, 2015). Yet despite this growth, the sector faces significant competitive pressures, infrastructural challenges, and variability in service quality. Cross River State, a tourism and hospitality hub, hosts a mix of indigenous and multinational fast-food outlets, including Crunches, De Choice, and Chicken Republic, which operate

within an increasingly competitive and innovation-driven market. Yet, many local operators struggle with limited product development, constrained digital adoption, and suboptimal distribution strategies (Nwokah & Ede, 2021).

The capacity to innovate determines whether firms can adapt to market changes and achieve sustainable performance (Boon & Edler, 2018). Organizational performance, as examined in this study, is understood as a composite construct encompassing operational efficiency, customer satisfaction, and profitability. This framing reflects the multidimensional nature of performance outcomes in service-sector firms and aligns directly with the measurement items employed in the study instrument.

Rogers' Diffusion of Innovations Theory (2003) explains how new ideas and technologies spread within social systems. Rogers identifies five attributes—relative advantage, compatibility, complexity, trialability, and observability—that influence adoption rates. In the fast-food industry, innovations perceived as offering relative advantages and compatibility with existing operations are more likely to be adopted and to produce performance gains (Rogers, 2003; Ali & Park, 2021).

Herzberg's Motivation–Hygiene Theory (1968) differentiates between intrinsic motivators and extrinsic hygiene factors that influence job satisfaction. In the context of innovation, intrinsic motivators—such as recognition and achievement—encourage employees to engage in creative problem solving and to support innovation initiatives, while hygiene factors provide the foundational conditions for stable performance.

Integrated Conceptual Framework integrates DOI and Herzberg's theory to assert that technological innovations (product, service, distribution) will positively influence performance, provided that employees are motivated and organizational conditions support diffusion. The conceptual model posits direct effects from each innovation dimension (X1–X3) to organizational performance (Y), with employee motivation acting as an enabling contextual factor.

Existing studies affirm a positive link between innovation and firm performance (Asenge & Dewua, 2024; Olajide, 2020). However, most evidence is drawn from manufacturing contexts or large urban markets. Sector-specific evidence from Nigeria's fast-food industry remains thin. Evidence from Cross River State is virtually absent. This gap limits the practical relevance of existing findings for managers and policymakers operating in similar emerging market contexts.

This study addresses that gap. It empirically examines how product innovation, service innovation, and distribution innovation each influence organizational performance among fast-food firms in Cross River State, Nigeria. Three specific objectives guide the

inquiry: first, to investigate the effect of product innovation in meeting changing consumer preferences; second, to evaluate the effect of service innovation on customer satisfaction and loyalty; and third, to assess the effect of distribution innovation on firm performance.

Methodology

Research Design

This study adopted a cross-sectional survey design to examine the relationship between business innovation and organizational performance among fast-food firms in Cross River State, Nigeria. A cross-sectional design was appropriate because data were collected at a single point in time and the study sought to establish associative rather than causal relationships across a defined population (Creswell & Creswell, 2018).

Population, Sampling Frame, and Sample

The target population comprised fast-food firms operating within Cross River State, Nigeria. Specifically, the study focused on registered quick-service restaurants operating across three local government areas with the highest commercial activity: Calabar Municipality, Calabar South, and Ogoja. A total of 67 registered fast-food outlets were identified through the Cross River State Ministry of Commerce and the Corporate Affairs Commission business registry, constituting the sampling frame.

Stratified random sampling was employed to ensure proportional representation across the three local government areas. Each stratum corresponded to one local government area, and outlets were randomly selected from each stratum using a numbered list and a random number table. From each selected outlet, two to three respondents—comprising the outlet manager and at least one senior operational staff member directly involved in product, service, or distribution decisions—were targeted, yielding a target sample of 200 respondents. Including both managers and operational staff was deliberate, as both groups possess firsthand knowledge of innovation practices and firm performance outcomes relevant to the study objectives.

Of the 200 questionnaires administered, 186 were returned, representing a response rate of 93%. After screening for incomplete responses, 179 questionnaires were retained as usable for analysis, giving an effective response rate of 89.5%. This sample size satisfies the minimum threshold recommended for multiple regression analysis, where a ratio of at least 10 to 15 observations per predictor variable is advised (Cohen, 1992).

Instrument and Measurement

Data were collected using a structured questionnaire divided into two sections. Section A captured respondent demographics and firm characteristics. Section B measured the four study constructs: product innovation, service innovation, distribution innovation, and

organizational performance. Each construct was measured using five items drawn and adapted from validated scales in the extant literature. All items were rated on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), consistent with standard practice in quantitative organizational research.

Reliability and Validity

The instrument was subjected to a pilot test involving 30 respondents drawn from fast-food outlets in Calabar Municipality who were not part of the main study sample. Cronbach's alpha coefficients were computed for each construct using the pilot data. Results indicated satisfactory internal consistency: product innovation (α = 0.81), service innovation (α = 0.78), distribution innovation (α = 0.80), and organizational performance (α = 0.83). All values exceeded the 0.70 threshold recommended for exploratory research (Nunnally & Bernstein, 1994). Face and content validity were established through expert review by two academic researchers with expertise in innovation management and organizational studies, who assessed item clarity, relevance, and construct alignment prior to final administration.

Data Analysis

Data were analyzed using IBM SPSS Statistics. Descriptive statistics were computed to summarize respondent and firm characteristics. Pearson correlation analysis was used to examine bivariate relationships among the study variables. Multiple linear regression analysis was employed to test the three hypotheses, with organizational performance as the dependent variable and product, service, and distribution innovations as independent variables. Construct scores for each variable were computed as the mean of the respective five items, consistent with the measurement specification. Statistical significance was evaluated at the 0.05 level throughout.

Results and Discussion

Reliability and Descriptive Statistics

Cronbach's alpha coefficients for the scales were: Product Innovation (α = .888), Service Innovation (α = .924), Distribution Innovation (α = .926), and Organizational Performance (α = .913). Table 1 presents descriptive statistics and correlations of product, service, distribution and organizational performance of fast-food industry in Cross River State.

Pearson correlations indicate positive and significant relationships among the innovation constructs and organizational performance ($r = .49–.58$, $p < .01$), suggesting that higher innovation scores are associated with improved performance. Multiple regression was used to assess the predictive power of product, service, and distribution innovation on organizational performance. The model was significant: $R^2 = .354$, $F(3,196) = 36.02$, $p < .001$. Table 2 reports on the regression coefficients.

Table 1: Descriptive Statistics and Correlations of product, service, distribution and organizational performance of fast-food industry in Cross River State

Variables	Mean	SD	1	2	3	4
1. Product Innovation	3.62	0.74	1			
2. Service Innovation	3.54	0.77	.53	1		
3. Distribution Innovation	3.49	0.80	.49	.56	1	
4. Organizational Performance	3.57	0.76	.58	.54	.49	1

Note. N = 200. Correlations significant at $p < .01$ (two-tailed).

Table 2: Multiple Regression Analysis Predicting Organizational Performance

Predictor Variables	B	SE	B	t	p
Constant	0.92	0.18	—	5.11	.000
Product Innovation	0.38	0.07	.41	5.43	.000
Service Innovation	0.26	0.08	.29	3.25	.001
Distribution Innovation	0.17	0.07	.19	2.41	.017

Model Summary: $R^2 = .354$, Adjusted $R^2 = .343$, $F(3,196) = 36.02$, $p < .001$

Discussion of Findings

The regression results reveal that product, service, and distribution innovation are significant positive predictors of organizational performance. Product innovation exhibited the largest standardized coefficient, implying that menu development and product differentiation are primary drivers of performance in the sampled fast-food firms. Service innovation and distribution innovation also contributed meaningfully, underscoring the importance of digital service mechanisms and efficient logistics. These outcomes corroborate prior empirical evidence (Batat, 2022; Ojo & Adeoye, 2023; Rahim & Azhar, 2021) and support the integrated theoretical framework combining DOI and Herzberg's theories.

Conclusion and Recommendations

This study demonstrates that product, service, and distribution innovations jointly and positively influence organizational performance within the fast-food industry in Cross River State. Managers should prioritize product development initiatives, invest in service digitization, and strengthen distribution partnerships to enhance competitiveness. Additionally, fostering employee motivation through training and recognition will facilitate successful innovation adoption. Future research should consider longitudinal designs, objective performance metrics, and broader innovation dimensions.

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