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Exploring the Mediating Role of New Product Performance in the Link between Service Innovation and Organizational (Financial and Non-Financial) Outcomes in Ghanaian Banks

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ABSTRACT

This study examines the mediating role of new product performance in the relationship between service innovation and both financial and non-financial performance in selected banks in Ghana using the dynamic capability theory as the theoretical lens. The study employed a descriptive research design to frame the study's methodology. The target population consisted of 159 commercial and community banks in Ghana. Utilizing a quantitative research approach, a structured questionnaire was used to gather data from 113 sampled respondents through purposive sampling, Structural Equation Modeling (SEM) was employed to analyze the data and assess the proposed relationships. The results reveal that service innovation has a direct and positive impact on the financial performance of banks, with a β coefficient of 0.316, affirming its importance in enhancing profitability and market share. However, the relationship between service innovation and non-financial performance was negative. Despite this, new product performance emerged as a significant mediator, strengthening the positive impact of service innovation on financial performance, with a β coefficient of 0.245 and a t-statistic of 2.409. The mediation effect of new product performance on the relationship between service innovation and non-financial performance was also validated, indicating that while service innovation alone may negatively affect non-financial outcomes, introducing successful new products can mitigate this impact. These findings contribute to the understanding of how service innovation influences different aspects of organizational performance in the banking sector. The study offers practical insights for bank managers, emphasizing the need to focus on new product development to maximize service innovation's benefits.

Keywords: Ghanaian Banks, Organizational Performance, New Product Performance, Service Innovation

I. INTRODUCTION

The banking industry is a cornerstone of economic development, providing essential financial services supporting individual and corporate growth (Belkhaoui, 2023; Rushchyshyn et al., 2021). In an increasingly competitive and rapidly changing market, banks must continuously innovate their services to maintain a competitive edge (Teece, 2018). Service innovation, which refers to the introduction of new or significantly improved service offerings, processes, or methods, is considered a critical driver of organizational performance (Damanpour & Aravind, 2012). However, the impact of service innovation on different dimensions of performance, particularly in the banking sector, remains a subject of ongoing debate (Chen et al., 2016).

The relationship between service innovation and organizational performance, both financial and non-financial, has been widely studied across various contexts. Globally, service innovation is regarded as a fundamental driver of competitive advantage, enhancing not only financial outcomes but also non-financial performance measures, such as customer satisfaction, brand reputation, and operational efficiency (Den Hertog et al., 2010; Kindström & Kowalkowski, 2014). Service innovation contributes to increased revenues and profitability through improved customer experiences and streamlined operations. However, non-financial performance metrics, such as customer loyalty and employee satisfaction, also benefit from innovative services that address unmet needs and enhance service quality. For example, in industries like Fintech, service innovations have resulted in new products that not only improve profit margins but also significantly boost customer satisfaction and loyalty (Bhutto et al., 2023).

In sub-Saharan Africa, businesses are increasingly focusing on the relationship between service innovation and organizational performance, given the region's resource constraints and rapidly changing market needs (Matekenya & Moyo, 2022; Oke, 2007). Service innovation in sectors such as financial services is essential for maintaining competitive advantage and improving organizational outcomes (Nwachukwu & Vu, 2022). While financial performance is a crucial

measure, non-financial performance indicators like service accessibility, customer trust, and social impact are also critical in this context. Service innovation has led to improvements in these non-financial metrics, particularly in areas with limited infrastructure, where innovative services can greatly improve access to essential services (Afriyie et al., 2019). While service innovation contributes to short-term gains in both financial and non-financial performance, the long-term impact is often limited by the ability of firms to scale these innovations to broader market segments (Abor & Quartey, 2010). This is particularly important when considering new product performance, as products that perform well in limited markets may not have the same success when scaled to larger, more diverse markets.

1.1 Statement of the Problem

Previous research has established a positive link between service innovation and financial performance, suggesting that banks that innovate effectively can enhance their profitability, market share, and overall financial stability (Hogan et al., 2011). Conversely, the relationship between service innovation and non-financial performance-such as customer satisfaction, brand reputation, and employee engagement has yielded mixed results, with some studies indicating potential negative effects (Ordanini & Parasuraman, 2011). These contradictory findings highlight the need for a more nuanced understanding of how service innovation influences both financial and non-financial outcomes.

One factor that may clarify these relationships is the role of new product performance. New product performance, defined as the success of newly introduced products in terms of market acceptance, sales, and contribution to the firm's objectives, is often seen as a key intermediary between innovation and organizational outcomes (Kumar et al., 2024; Henard & Szymanski, 2001; Molina-Castillo & Munuera-Aleman, 2009). However, the extent to which new product performance mediates the relationship between service innovation and various performance metrics in the banking sector has not been thoroughly explored, particularly in the context of developing economies like Ghana.

1.2 Research Objective

This paper examined the mediating role of new product performance on the relationships between service innovation and the financial and non-financial performance of banks.

1.3 Research Question

This paper asks the question.

What is the mediating role of new product performance on the relationships between service innovation and the financial and non-financial performance of banks?

By employing a quantitative approach and utilizing Structural Equation Modeling (SEM) to analyze data from 113 respondents, this research seeks to provide empirical evidence on how new product performance influences the effectiveness of service innovation in achieving desired organizational outcomes.

The findings of this study offer valuable insights for both scholars and practitioners. For researchers, the study contributes to the literature by providing a more comprehensive understanding of the mechanisms through which service innovation impacts performance in the banking sector. For bank managers, the results underscore the importance of focusing on new product development as a strategy to maximize the benefits of service innovation, thereby enhancing both financial and non-financial performance.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Dynamic Capabilities Theory (DCT)

Dynamic Capabilities Theory (DCT) is a crucial framework for understanding how organizations adapt and thrive in rapidly changing environments. DCT emphasizes the importance of an organization’s ability to learn, innovate, and reconfigure its resources to respond effectively to external changes (Teece, 2007). This theory is particularly relevant in the context of service innovation, where continuous learning and adaptation are key to maintaining competitive advantage (Teece, 2018).

DCT also addresses the challenges posed by market turbulence, highlighting that organizations with strong dynamic capabilities are better equipped to sense and respond to market shifts, seize emerging opportunities, and overcome challenges (Peters et al., 2019). This framework is vital for understanding how organizations strategically navigate dynamic market conditions, especially in relation to stakeholder management and regulatory compliance.

The theory also underscores the importance of market linking capabilities, which refer to an organization’s ability to manage relationships with stakeholders in changing markets (Eisenhardt & Martin, 2000). Additionally, DCT provides insights into how firms with robust capabilities can better navigate regulatory changes, ensuring compliance while leveraging opportunities arising from new regulations (Teece et al.,1997). Asamoah et al. (2020) further argue

that a firm's social networks can enhance its service innovation and customer-oriented performance, reinforcing the importance of relational capabilities in dynamic environments.

Overall, DCT offers a comprehensive framework for exploring organizational adaptability, learning, and performance in uncertain environments.

2.2 Empirical Review

2.2.1 Service Innovation and New Product Performance

Service innovation (SI) has emerged as a critical factor in enhancing firm performance, especially in service-oriented industries. Studies by Menor and Roth (2008), Carbonell et al. (2009), and Melton and Hartline (2010) emphasize the significance of introducing new services, leveraging diverse resources, and utilizing knowledge and skills to implement SI effectively. This approach not only drives value creation but also improves firm performance. In competitive markets, service-oriented businesses that focus on innovation combine various resources to deliver superior customer value, which is closely linked to enhanced firm performance (Berry et al., 2006; Maglio & Spohrer, 2008). Additionally, firms that innovate their services are better positioned to adapt to external changes, recognize opportunities, and form strategic partnerships, leading to superior new product performance (Lütjen et al., 2019).

Firms with substantial innovative capabilities are more likely to acquire valuable knowledge that contributes to their overall performance. In dynamic markets, embracing innovative services is essential for firms to remain competitive. Asamoah and Andoh-Baidoo (2018) found that factors such as enterprise resource planning (ERP) systems, ethical behaviour, and organizational integration significantly shape business process outcomes, particularly in the Sub-Saharan African context. Furthermore, Yen et al. (2012) demonstrated that firms investing in SI respond more effectively to market competition by efficiently building and deploying distinctive resources, which strengthens their innovation performance. In doing so, these firms are better equipped to deliver innovative products and services to key stakeholders, ultimately enhancing their market position.

The relationship between SI and new product performance is well-documented, with research highlighting the importance of aligning SI efforts with customer preferences and market demands (Menor et al., 2002). In the banking sector, service innovation may involve developing new financial products, digital platforms, or customer service enhancements, which can significantly improve the performance of new products. Damanpour and Schneider (2006) argue that organizations engaged in continuous service innovation experience higher success rates in new product development, largely due to their ability to meet evolving customer needs and capitalize on market opportunities. In conclusion, service innovation plays a pivotal role in the success of new products, making it essential for firms, particularly in the banking sector, to integrate innovative practices to remain competitive. Consequently, the following hypothesis is proposed:

H1: Service innovation is positively related to new product performance in selected banks in Ghana.

2.2.2 Service Innovation and Organizational Performance (Financial and Non-Financial Performance)

Service innovation is a critical factor in enhancing organizational performance, encompassing both financial and non-financial metrics. Service innovation in organizations facilitates the development of advanced technologies and innovative processes that improve efficiency and service effectiveness (Bello et al., 2004). It serves as a significant mechanism for organizational transformation in response to internal and external environmental changes (Hult et al., 2004). Research has demonstrated that the impetus for service innovation often comes from customers and suppliers, prompting organizations to update their service portfolios through the adoption of the latest technologies, which in turn boosts organizational performance (Soosay & Hyland, 2005).

Service innovation is deeply embedded in the processes of knowledge development and diffusion, shaping the integration of knowledge through resource sharing and collaboration with partners (Lusch & Nambisan, 2015). Specifically, service innovations have been shown to improve supplier interactions by enhancing communication and collaboration, leading to reduced lead times and positively impacting the supply chain. Furthermore, service innovations contribute to sustainability efforts, such as greener transportation and eco-friendly packaging, which benefit the environment, appeal to environmentally conscious consumers, and reduce costs through energy efficiency and resource conservation.

Kilay et al. (2022) examined the impact of e-payment and e-commerce services on the supply chain performance of micro, small, and medium enterprises (MSMEs) in Indonesia. Their study confirmed that service innovations positively influence organizational performance, particularly within market-level domains. However, it is essential to recognize that performance evaluation varies across studies, particularly in the context of service innovation. Richard et al. (2009) and Damanpour and Evan (1984) identified two primary approaches to measuring organizational performance: financial metrics and non-financial metrics. Financial metrics, such as return on assets (ROA), return on sales (ROS), and earnings before interest and tax (EBIT), provide a quantitative view of performance and are often derived from objective data like business financial statements (Huang, 2014). Conversely, non-financial performance

measurements are typically subjective and based on managers' assessments of the organization's condition (Chen et al., 2014).

In favourable economic environments, managers may exhibit optimism, influencing their assessments of non-financial performance. In such contexts, service innovation plays a substantial role. Additionally, there is an inherent relationship between financial and non-financial performance, with the former often trailing the latter. Matear et al. (2004) utilized the sources–position–performance framework to observe the direct impact of service innovation on non-financial performance indicators, such as customer satisfaction and brand effect, which subsequently influence financial performance. O'Cass and Sok (2013) further contend that service innovation indirectly shapes financial performance through its impact on service quality. Moreover, Arthur et al. (2012) proposes that addressing service-related issues, such as unreliable helplines and incomplete information, through targeted service innovations can lead to improved customer satisfaction, loyalty, and competitive advantage, ultimately enhancing both financial and non-financial performance.

In summary, the interplay between financial and non-financial performance measures highlights the complex dynamics involved in evaluating the impact of service innovation on a firm's overall success. The following sections explore the specific relationships between service innovation and financial performance, as well as service innovation and non-financial performance, providing further evidence for the proposed hypotheses.

2.2.3 Service Innovation and Financial Performance

Service innovation directly impacts financial performance by enabling organizations to create additional value for customers, reduce operational costs, and capture greater market share. In the banking industry, service innovation may involve the introduction of new banking services, improvement of customer service processes, or the adoption of advanced technologies, all of which contribute to enhanced financial performance (Feng et al., 2021; Zhou et al., 2005). Empirical studies support this view, showing that banks investing in service innovation tend to achieve better financial outcomes, including higher profitability and return on assets (El Chaarani et al., 2022; Storey & Hughes, 2013). This success is attributed to service innovation's ability to differentiate banks from competitors, attract new customers, and increase customer retention rates, all of which are critical for financial success.

Moreover, service innovation can lead to cost reductions through streamlined processes and the adoption of more efficient technologies (Islam, 2023; Damanpour et al., 2009). For instance, the introduction of digital banking platforms reduces the need for physical branches, lowering operational costs and improving financial performance. Therefore, service innovation is positively related to financial performance. Consequently, the following hypothesis is proposed:

H2: Service innovation has a positive relationship with financial performance.

2.2.4 Service Innovation and Non-Financial Performance

Service innovation also significantly influences non-financial performance metrics, including customer satisfaction, brand equity, and employee engagement. Lusch and Nambisan (2015) argue that service innovation is essential for enhancing the overall customer experience, a key driver of customer satisfaction and loyalty in the banking sector. Innovative services that effectively meet customer needs lead to higher levels of customer satisfaction, which is crucial for building a strong brand reputation (Ostrom et al., 2015). Additionally, service innovation can improve employee engagement by fostering a culture of creativity and continuous improvement, resulting in higher job satisfaction and organizational commitment.

The positive relationship between service innovation and non-financial performance is further supported by research emphasizing the role of innovation in enhancing organizational culture and stakeholder relationships (Lim et al., 2021; Mahr et al., 2014). By consistently introducing innovative services, banks can strengthen their brand image, improve customer relationships, and create a more motivated workforce. Therefore, the following hypothesis is proposed:

H3: Service innovation has a positive relationship with non-financial performance.

2.2.5 New Product Performance and Financial Performance

New product performance is crucial in determining a firm's financial success, significantly affecting essential metrics such as sales growth, market share, and profitability (Calantone et al., 2006). The successful introduction of new products not only generates increased revenue but also enhances profitability and strengthens a firm's competitive position—key elements of robust financial performance. Empirical studies consistently demonstrate a positive relationship between new product performance and financial outcomes across various industries. For example, Henard and Szymanski (2001) conducted a meta-analysis revealing that successful new products correlate with higher profitability and market share, underscoring the importance of products that effectively meet customer needs and

outperform competitors. Similarly, Sorescu and Spanjol (2008) emphasized that successful new products contribute to immediate sales increases and long-term financial stability by building brand equity and fostering customer loyalty.

The dynamic capability framework further elucidates the relationship between new product performance and financial success by highlighting an organization's ability to integrate, build, and reconfigure both internal and external competencies. This capability is essential for sustaining competitive advantage in rapidly changing environments (Teece et al., 1997). High-performing new products reflect an organization's capacity to innovate and respond effectively to market demands. By meeting customer needs more precisely, these products can capture greater market value, driving revenue growth, improving market share, and allowing for premium pricing strategies due to their innovative features and superior quality (Eisenhardt & Martin, 2000).

Moreover, the development and successful launch of new products often require substantial investments in research and development (R&D), marketing, and operational processes. When guided by dynamic capabilities, these investments can lead to process improvements and efficiencies that enhance financial performance. Innovations in production techniques, for instance, can reduce costs and improve margins, while effective marketing strategies can boost sales volume and market penetration (Tidd & Bessant, 2020). This relationship is particularly salient in the banking sector, where the introduction of successful financial products—such as new loan schemes, investment options, or digital banking services—can significantly enhance a bank's financial health. In Ghana, effective new product performance can lead to higher profitability and increased market share, ultimately improving overall financial performance. Thus, the continual introduction of successful new products is vital for sustaining financial growth and stability, particularly in volatile economic environments. Prior studies (Griffin & Page, 1993; Zirger & Maidique, 1990) argue that firms that excel in new product development, particularly in the banking sector, are better positioned to achieve superior financial performance, as the continuous introduction of successful financial products—such as loan schemes and digital banking services—enhances profitability and market share, thereby supporting sustainable growth and competitiveness even in volatile economic environments. Given these findings, it is proposed that:

H4: New product performance is positively related to financial performance.

2.2.6 New Product Performance and Non-Financial Performance

In addition to financial metrics, new product performance significantly influences non-financial performance indicators such as customer satisfaction, brand reputation, and employee morale. These non-financial aspects are increasingly recognized as essential components of overall organizational success, particularly in service-oriented industries like banking (Kaplan & Norton, 1992).

Successful new product introductions are closely associated with enhanced customer satisfaction, improved brand reputation, and stronger employee morale. For example, Barczak et al. (2009) found that the success of new products significantly improves customer satisfaction by better meeting customer needs and expectations, which in turn fosters customer loyalty and positive word-of-mouth. Cooper (2011) further demonstrated that companies with high-performing new products often experience enhanced brand equity, as innovative products contribute to a brand's reputation for quality and reliability. Additionally, Calantone et al. (2002) showed that successful new product development boosts employee motivation and organizational commitment, as employees take pride in working for a company recognized for its innovation and market leadership. These studies collectively emphasize the vital role of new product performance in driving various non-financial performance outcomes that contribute to the overall success and sustainability of an organization.

The principles of dynamic capability provide a compelling framework for understanding the relationship between new product performance and non-financial performance in organizations (Teece et al.,1997). Organizations that effectively leverage dynamic capabilities to develop and launch successful new products not only respond efficiently to market changes but also enhance various non-financial performance metrics. High-performing new products showcase the organization's innovation capability, significantly boosting customer satisfaction by delivering superior value and meeting evolving customer needs. This satisfaction, in turn, fosters customer loyalty and strengthens the company's reputation as a market leader. Moreover, the successful introduction of new products reflects the firm's ability to innovate, which can enhance employee morale and attract top talent who are eager to work in a forward-thinking environment (Gök & Peker, 2017).. Through the lens of dynamic capability, new product performance is intrinsically linked to non-financial performance outcomes such as customer satisfaction, brand reputation, and employee engagement, all of which contribute to the sustainable success of the organization.

Furthermore, Gustafsson et al. (2005) argue that successful new products enhance customer satisfaction by meeting or exceeding customer expectations, thereby fostering loyalty and long-term relationships. In the banking sector, the introduction of innovative financial products that address specific customer needs can lead to higher customer satisfaction, subsequently improving the bank's reputation and brand equity.

The positive influence of new product performance extends to employee morale and engagement. Cooper and Kleinschmidt (2007) found that employees involved in the development and launch of successful products often

experience a sense of accomplishment and motivation, leading to increased productivity and job satisfaction. This connection between new product performance and employee engagement underscores the broader impact of innovation on organizational culture and performance. Based on the discussion above, this research hypothesizes that:

H5: New product performance is positively related to non-financial performance.

2.2.7 Mediating Role of New Product Performance in the Relationship Between Service Innovation and Financial Performance

The mediating role of new product performance in the relationship between service innovation and financial performance suggests that the benefits of service innovation are partially realized through the successful introduction and performance of new products. Rhee et al. (2010) argue that while service innovation directly impacts financial performance, its full potential is realized when it leads to the development and success of new products. This indicates that new product performance acts as a crucial intermediary mechanism that facilitates the translation of service innovations into tangible financial outcomes.

New product performance significantly influences the relationship between service innovation and both financial and non-financial performance within organizations. Dynamic capability theory, which emphasizes a firm's ability to adapt and reconfigure resources in response to changing environments, is central to understanding this relationship (Teece, 2007). Service innovation, as a manifestation of dynamic capabilities, enables firms to develop novel ways of delivering value to customers. However, the translation of service innovation into measurable financial performance largely depends on the effectiveness of new product performance.

New product performance serves as a bridge between service innovation and organizational performance metrics by facilitating the commercialization and market adoption of innovative service offerings. Teece (2016) notes that dynamic capabilities involve not only the creation of new knowledge and resources but also their deployment and utilization in the marketplace. Therefore, firms that excel in new product development and launch are better equipped to leverage their service innovations for competitive advantage. Effective new product performance ensures that service innovations are successfully translated into products or solutions that meet customer needs and preferences, leading to improved financial performance through increased revenues and market share.

In the banking sector, the introduction of innovative services can create opportunities for new product development, which, when successful, enhances financial performance. Rosenbusch et al. (2011) demonstrate that an innovative digital banking service, for example, may lead to the development of new financial products that attract more customers and increase profitability. Thus, new product performance mediates the relationship between service innovation and financial performance, acting as a key mechanism through which the benefits of service innovation are fully realized. Based on the arguments above, this study hypothesizes that:

H6: New product performance mediates the relationship between service innovation and financial performance.

2.2.8 Mediating Role of New Product Performance in the Relationship Between Service Innovation and Non-Financial Performance

The relationship between service innovation and non-financial performance is also mediated by new product performance. Successful new products that emerge from service innovations can significantly enhance non-financial outcomes such as customer satisfaction, brand image, and employee morale. Mahr et al. (2014) argue that the introduction of innovative products derived from service innovations leads to improved customer experiences, which in turn bolsters customer satisfaction and loyalty.

The mediating role of new product performance extends beyond financial metrics to include non-financial performance dimensions such as customer satisfaction, brand equity, and organizational reputation. According to dynamic capabilities theory, firms that possess the ability to continuously innovate and adapt are more likely to achieve superior performance outcomes across various dimensions (Teece, 2014). By successfully bringing innovative services to market and delivering enhanced value to customers, firms can improve their reputation and strengthen customer relationships. This, in turn, contributes to non-financial performance measures such as brand loyalty and positive word-of-mouth. Consequently, new product performance serves as a critical link between service innovation and both financial and non-financial performance, emphasizing the importance of dynamic capabilities in driving organizational success.

The mediating role of new product performance highlights the significance of dynamic capabilities in leveraging service innovation for enhanced organizational performance. By effectively translating service innovations into marketable products and solutions, firms can not only drive financial growth but also achieve non-financial objectives such as customer satisfaction and brand reputation. Dynamic capabilities theory provides a valuable framework for understanding the mechanisms through which firms create and capture value from innovation, underscoring the need for continuous adaptation and evolution in response to changing market dynamics.

In the banking sector, the introduction of innovative services that lead to the development of successful new products can result in improvements in customer satisfaction and brand reputation. Ostrom et al. (2015) suggest that new products that effectively meet customer needs contribute to positive customer experiences and reinforce the bank's brand image. Furthermore, employees involved in the successful launch of new products may experience higher job satisfaction and engagement, which further enhances non-financial performance. Thus, new product performance mediates the relationship between service innovation and non-financial performance. Based on the discussion above, this study hypothesizes that:

H7: New product performance mediates the relationship between service innovation and non-financial performance.

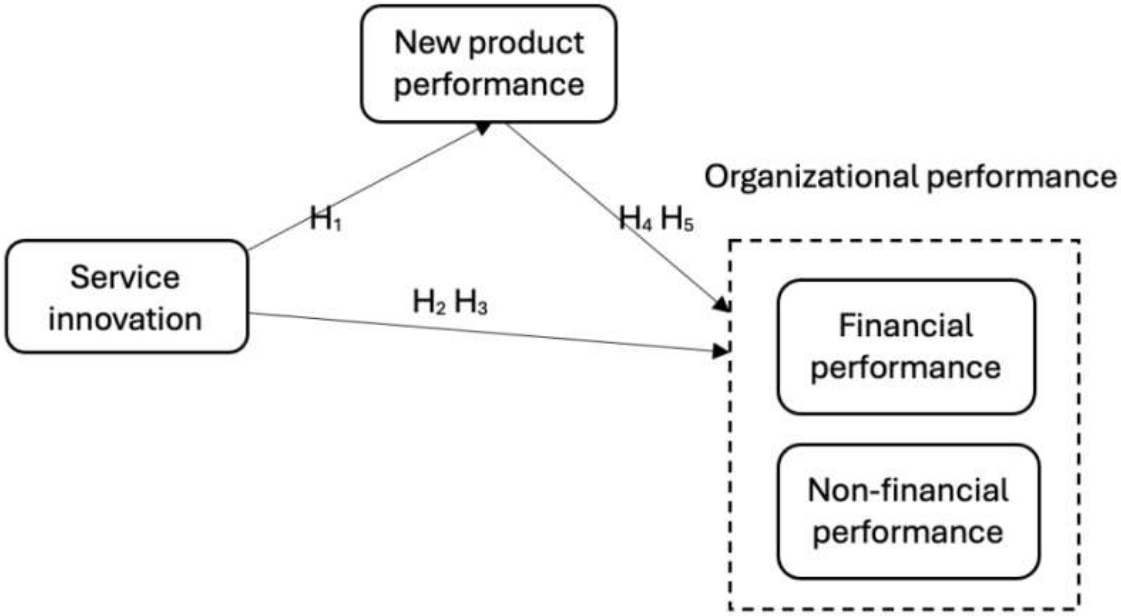

Figure 1
Conceptual Framework

III. METHODOLOGY

3.1 Research Design

A descriptive research design was used in this study to quantitatively analyze the relationships between service innovation, new product performance, and both financial and non-financial performance outcomes (Bryman, 2016; Creswell, 2014). The structured nature of descriptive research design facilitates a clear and systematic approach to data collection and analysis, making it easier to interpret results and draw conclusions about the relationships among variables (Fowler, 2013).

This study adopts a quantitative research approach (Bloomfield & Fisher, 2019), to investigate the mediating role of new product performance in the relationship between service innovation and the financial and non-financial performance of selected banks in Ghana. A quantitative approach is appropriate for this study as it allows for the collection and analysis of numerical data, which is essential for testing hypotheses and examining relationships between variables (Creswell & Creswell, 2017).

3.2 Population and Sampling

The target population for this study consisted of 159 commercial and community banks in Ghana. These banks were identified using financial reports and industry rankings published by Price Water Coopers (PwC, 2023). To determine the appropriate sample size, Yamane's (1967) formula for sample size calculation was applied, resulting in a sample of 113 respondents. The respondents included senior managers - specifically branch managers, sales/marketing managers, and operations managers - selected due to their active roles in decision-making processes related to service innovation, new product development, and performance evaluation. These individuals were deemed to possess the relevant expertise and knowledge necessary to provide informed insights into the variables under investigation.

A purposive sampling technique was employed to select the 113 respondents. This non-probability sampling method was chosen to ensure the inclusion of managers with direct involvement in key decision-making areas. According to Vehovar et al. (2016), purposive sampling is effective when the aim is to gather data from individuals who are particularly knowledgeable about the subject matter. The selected banks were drawn from a list of top-performing banks in Ghana, based on criteria such as profitability, asset base, and customer satisfaction metrics, as outlined in the banks' annual reports and industry rankings.

3.3 Data Collection

Our study is a cross-sectional study, where data is collected from a specific sample at a single point in time to examine relationships between the variables of interest (Levin, 2006). Thus, primary data was collected through a structured questionnaire distributed to the selected respondents. The questionnaire was designed to capture information on the following key variables: service innovation, new product performance, financial performance, and non-financial performance. The questionnaire consisted of closed-ended questions using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to measure respondents' perceptions of the variables.

The questionnaire was pre-tested with a small group of respondents to ensure clarity and reliability. The final version of the questionnaire was administered both in person and electronically, depending on the preference of the respondents. A total of 113 completed questionnaires were received, representing a 100% response rate.

3.4 Measurement of Variables

Service Innovation: This variable was measured using a scale adapted from prior research on service innovation in the banking sector (Avlonitis et al., 2001; Chen et al., 2009). The scale includes items that assess the extent to which the bank has introduced new or significantly improved services, processes, or business models.

New Product Performance: New product performance was measured using indicators such as market acceptance, sales growth, profitability, and customer satisfaction with the new products. The scale was adapted from previous studies on product performance (e.g., Calantone et al., 2006; Zhang & Li, 2010).

Financial Performance: Financial performance was measured using self-reported data on key financial indicators such as profitability, return on assets, and market share (Sroufe & Gopalakrishna-Remani, 2019). Respondents were asked to evaluate their bank's financial performance over the past three years relative to competitors. Non-Financial Performance: Non-financial performance was measured using indicators such as customer satisfaction, brand reputation, and employee engagement. The scale was adapted from the balanced scorecard framework (Kaplan & Norton, 1992; Richard et al., 2009).

IV. FINDINGS & DISCUSSIONS

4.1 Demographics, Reliability and Validity Assessment

The socio-demographic analysis of respondents from banking institutions in Ghana's Upper East Region highlights several notable trends. The banking workforce is predominantly male, signaling the need for gender diversity initiatives. Most employees fall within the 25–44 age range, indicating a youthful, dynamic workforce potentially well-suited for driving innovation. Educational qualifications are high, with the majority of employees holding at least a bachelor's degree, which likely enhances their professional competency and service delivery.

Commercial banks dominate the sector, underscoring their operational significance in the region. The distribution of roles, from Personal Bankers to Operations Managers, reveals a complex organizational structure within the sector. A significant proportion of respondents have multiple years of tenure, suggesting workforce stability, which can positively affect service reliability. The prevalence of large banking organizations, alongside a substantial number of institutions that have operated for over 20 years, reflects a stable and experienced banking environment. Additionally, the mix of wholly Ghanaian, foreign, and joint venture banks creates a diverse strategic landscape shaped by both domestic and international influences.

Overall, while the region's banking sector is youthful, highly educated, and stable, the lack of gender diversity remains an area for improvement. The sector's dominance by commercial banks and its strong representation of large, experienced institutions provide a solid foundation for sustained growth and development.

Table 1

Demographics of Respondents

Characteristics	Frequency	Percentage
Gender		
Male	75	66.4
Female	38	33.6
Age		
25-34	50	44.2
35-44	58	51.3
45-54	5	4.4
Educational level		
Higher National Diploma	8	7.1
First Degree	68	60.2
Masters	32	28.3
MPhil/PhD	2	1.8
Others	3	2.7
Type of bank		
Commercial banks	76	67.3
Rural/Community banks	37	32.7
Designation in organization		
Personal Banker	33	29.2
Vault/ATM Custodian	7	6.2
Sales/Marketing Manager	33	29.2
Operations Manager	28	24.8
Branch Manager	12	10.6
Years working in organization		
Less than 1 year	6	5.3
1-5 years	42	37.2
6-10 years	39	34.5
11-15 years	20	17.7
16-20 years	6	5.3
Years working in designation		
Less than 1 year	11	9.7
1-5 years	63	55.8
6-10 years	32	28.3
11-15 years	7	6.2
Number of employees		
1-5	3	2.7
6-29	38	33.6
30-99	14	12.4
100 and more	58	51.3
Age of organization		
1-5 years	12	10.6
6-10 years	14	12.4
11-15 years	14	12.4
16-20 years	23	20.4
More than 20 years	50	44.2
Form of ownership		
Wholly Ghanaian	67	59.3
Joint Venture	21	18.6
Wholly Foreign	25	22.1
Total	**113**	**100.0**

Table 2 summarizes the key outcomes of the reliability and validity assessments. Internal consistency was evaluated using Cronbach's alpha, while composite reliability was used to assess construct reliability (Carmines & Zeller, 1979). Both metrics surpassed the accepted threshold of 0.7, as outlined by Hair et al. (2017), demonstrating strong internal consistency. We also examined convergent and discriminant validity (Voorhees et al., 2016). Convergent validity was confirmed with factor loadings exceeding the 0.7 threshold and average variance extracted (AVE) values surpassing 0.5 (Fornell & Larcker, 1981). These findings align with existing literature, reinforcing the study's convergent validity.

Table 2
Reliability and Validity

Construct	Item	Loading	a	CR	AVE
FP	finp1	0.871	0.821	0.894	0.737
	finp2	0.887			
	finp3	0.816			
NPP	newp1	0.833	0.887	0.917	0.688
	newp2	0.865			
	newp3	0.784			
	newp4	0.823			
	newp5	0.841			
NFP	nfinp1	0.802	0.721	0.842	0.640
	nfinp2	0.809			
	nfinp3	0.789			
SI	seino1	0.825	0.831	0.887	0.663
	seino3	0.761			
	seino4	0.867			
	seino5	0.800			

* FP: Financial performance: NPP: New product performance: NFP: Non-financial performance: a: Cronbach's alpha; CR: Composite Reliability; AVE: Average Variance Extracted.

To assess discriminant validity, we applied the Fornell-Larcker criterion. This approach determines whether constructs are distinct by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlations between constructs (Ab Hamid et al., 2017). As shown in Table 3, the diagonal values (in bold) exceed the inter-construct correlations, indicating that each construct is distinct from the others (Zhou et al., 2018). These results confirm strong discriminant validity.

Table 3
Discriminant Validity

	FP	NFP	NPP	SI
FP	**0.859**			
NFP	0.642	**0.800**		
NPP	0.572	0.739	**0.830**	
SI	0.561	0.475	0.693	**0.814**

4.2 Structural Model Result

Table 4 presents the outcomes of the hypothesized relationships within the model, evaluated through Partial Least Squares Structural Equation Modeling (PLS-SEM) (Becker et al., 2023). The analysis was conducted using SmartPLS 3, a widely recognized software for PLS-SEM (Hair et al., 2017). Table 4 details each hypothesis, including the respective paths, standardized beta coefficients (β), standard deviations (SD), t-statistics (t), and significance levels (Sig.).

The results revealed an interesting analysis, illustrating the relationships between SI, NPP, FP, and NFP. For hypothesis 1, the path coefficient of *(β=0.693, P=0.000*) indicates a strong positive relationship between SI and NPP demonstrating that this relationship is statistically significant. Moreover, the β coefficient of 0.316 indicates a moderate positive relationship between service innovation and financial performance. This relationship is statistically significant, as evidenced by a t-statistic of 2.06, which is slightly above the critical value of 1.96, and a p-value of 0.040, which is less than 0.05. Conversely, the path coefficient of -0.071 suggests a weak and negative relationship between service innovation and non-financial performance. However, this relationship is not statistically significant, as indicated by a t-statistic of 0.595, which falls below the critical value of 1.96, and a p-value of 0.552, which exceeds the 0.05 threshold.

Also, the analysis reveals that the path coefficient of 0.353 indicates a moderate positive relationship between new product performance and financial performance. This relationship is statistically significant, as evidenced by a t-statistic of 2.516, which surpasses the critical value of 1.96, and a p-value of 0.012, which is less than 0.05. Similarly, the path coefficient of 0.789 indicates a strong positive relationship between new product performance and non-financial performance. The statistical significance of this relationship is confirmed by a t-statistic of 8.65, which is significantly

above the critical value of 1.96, and a p-value of 0.000, which is well below 0.05. These findings underscore the critical role of new product performance in driving both financial and non-financial performance outcomes, with robust statistical support for the strength and significance of these relationships.

Table 4
Path Coefficient

Hypothesis		β coefficient	Standard Deviation	t-statistics	P Value	Decision
H1	SI -> NPP	0.693	0.059	11.7	0.000	Supported
H2	SI -> FP	0.316	0.153	2.060	0.040	supported
H3	SI -> NFP	-0.071	0.12	0.595	0.552	Not supported
H4	NPP -> FP	0.353	0.14	2.516	0.012	supported
H5	NPP -> NFP	0.789	0.091	8.650	0.000	supported
H6	SI -> NPP -> FP	0.245	0.102	2.409	0.016	Supported
H7	SI -> NPP -> NFP	0.546	0.088	6.183	0.000	Supported

Furthermore, the results indicate a positive and moderately strong indirect effect of Service Innovation (SI) on Financial Performance (FP) through New Product Performance (NPP), as demonstrated by the β coefficient of 0.245. The t-statistic of 2.409 exceeds the critical value of 1.96, and the p-value of 0.016 is below the 0.05 significance level, confirming the statistical significance of this indirect effect. Additionally, the β coefficient of 0.546 suggests a positive and strong indirect effect of SI on Non-Financial Performance (NFP) through NPP. The t-statistic of 6.183 significantly surpasses the critical threshold of 1.96, and the p-value is 0.000, which is highly significant ($p < 0.05$). These findings support the hypothesis that New Product Performance significantly mediates the relationship between Service Innovation and Non-Financial Performance.

Overall, the significant indirect path from Service Innovation to Financial Performance via New Product Performance indicates that improvements in Service Innovation lead to enhanced Financial Performance through better New Product Performance.

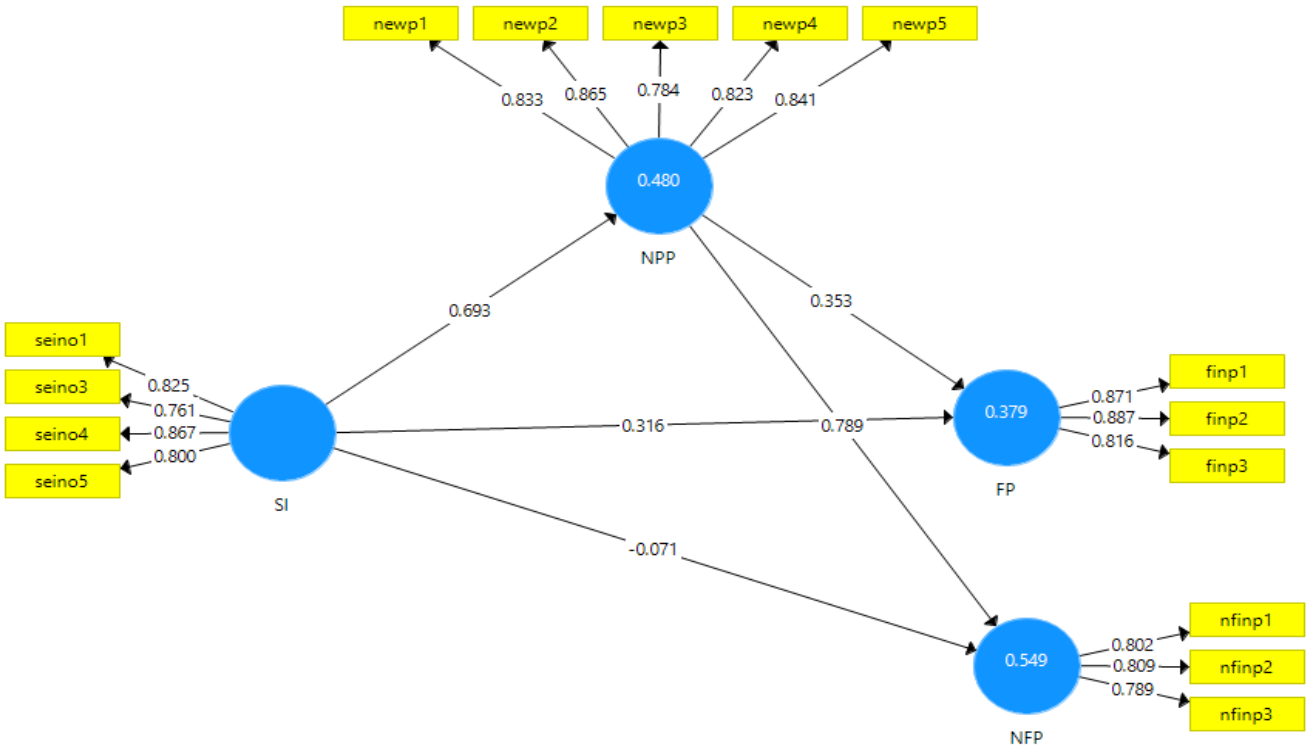

Figure 2
Structural Model

4.3 Discussion

The data analysis highlights a moderately positive relationship between service innovation and financial performance. This relationship is statistically significant suggesting that banks that invest in service innovation can expect moderate improvements in their financial outcomes. Service innovation can lead to enhanced operational efficiencies, reduced costs, and improved customer satisfaction, which in turn contribute to better financial performance (Cooper & Kleinschmidt, 1995). These innovations often result in new revenue streams and higher profitability, as they help firms differentiate themselves in competitive markets and better meet customer needs.

In the context of the study, service innovation (such as introducing new banking technologies, developing innovative financial products, and enhancing customer service processes) enables banks to adapt to evolving market conditions and customer needs. This adaptability and continuous improvement in services may lead to enhanced customer satisfaction, increased market share, and ultimately, improved financial performance, as corroborated by Damanpour et al. (2009).

Similarly, service innovation allows banking organizations to differentiate themselves in a competitive market, attract new customers, and retain existing ones by offering superior value. As banks innovate their services, they can optimize operational efficiencies, reduce costs, and generate higher revenues, contributing to improved financial performance (Feng et al., 2021). Therefore, the positive and significant relationship between service innovation and financial performance aligns with the principles of dynamic capability theory, highlighting the strategic importance of innovation in achieving financial success (Asamoah et al., 2020).

The statistically significant findings from the study reinforce the importance of strategic investment in service innovation to achieve financial goals. This supports the broader literature that links innovation with enhanced financial performance, emphasizing that companies need to prioritize service innovation as part of their strategic initiatives to drive financial growth (Henard & Szymanski, 2001). Furthermore, the relationship between service innovation and non-financial performance appears to be weak and negative. This relationship is not statistically significant, suggesting that service innovation does not directly impact non-financial performance metrics such as employee satisfaction, brand reputation, or operational efficiency in a significant way. This finding challenge some of the existing literature that often posits a positive link between innovation and various non-financial performance aspects (Sarin & McDermott, 2003). The lack of statistical significance implies that other factors may play a more critical role in influencing non-financial outcomes.

While dynamic capability theory suggests that organizations should continuously evolve and adapt to maintain competitive advantage, the non-significant relationship between service innovation and non-financial performance in this study suggests that, for banks in Ghana, the immediate impacts of service innovation on non-financial metrics (such as employee satisfaction, customer loyalty, and brand reputation) might not be as pronounced. Although this result contradicts some previous research findings that identified a positive relationship between service innovation and non-financial performance (e.g., Lusch & Nambisan, 2015; Ostrom et al., 2015), it aligns with other studies that have questioned this association, particularly in certain contexts where innovation adoption does not lead to immediate non-financial gains (Phan, 2019). These contrasting outcomes suggest that the relationship between service innovation and non-financial performance may be context-dependent, varying across industries and markets.

Several factors could explain this finding. First, the benefits of service innovation on non-financial performance might have a longer gestation period, requiring more time to materialize compared to financial metrics. Second, the innovations implemented may be primarily focused on financial gains rather than improving non-financial aspects (Feng et al., 2021). Lastly, other contextual variables in the Ghanaian banking sector could affect the relationship between service innovation and non-financial performance, such as regulatory environment, market maturity, or customer preferences. This result does not undermine the importance of service innovation. Still, it suggests that banks might need to adopt a more holistic approach, ensuring that innovations are designed not only to enhance financial outcomes but also to improve non-financial aspects. By doing so, banks can achieve a more balanced and sustainable performance, leveraging dynamic capabilities to foster long-term success and resilience (Tidd & Bessant, 2020).

The mediation analysis of new product performance on the relationship between service innovation and both financial and non-financial performance provides critical insights into how innovation within services translates into broader organizational outcomes. Service innovation, such as the introduction of new technologies and improved customer service processes, directly influences the development and success of new products (Mahr et al., 2014). These new products, in turn, drive financial performance by capturing market share and enhancing operational efficiencies. The significant mediation effect indicates that the benefits of service innovation are not just direct but also amplified through the success of new products. This finding aligns with the dynamic capability theory, which posits that firms' abilities to integrate and reconfigure competencies are essential for achieving superior financial outcomes (Teece, 2014). By innovating services, banks can enhance their product offerings, which then leads to better financial performance through increased sales, market penetration, and cost reductions.

Moreover, the study reveals an even stronger mediating effect of new product performance on the relationship between service innovation and non-financial performance. The results indicate a highly significant and robust positive

effect. This suggests that service innovation not only contributes to financial gains but also significantly enhances non-financial performance metrics such as customer satisfaction, brand reputation, and operational efficiency. These findings underscore the importance of fostering a culture of continuous innovation to achieve comprehensive performance improvements across both financial and non-financial dimensions (Sarin & McDermott, 2003).

Service innovation leads to the development of new products that enhance non-financial performance metrics such as customer satisfaction, brand reputation, and employee morale (Gök & Peker, 2017). The strong mediation effect suggests that when banks innovate their services, the resultant new products significantly improve non-financial outcomes. This can be attributed to new products meeting customer needs more effectively, thereby increasing customer loyalty and satisfaction. Additionally, innovative products can boost the brand image and employee satisfaction, as employees take pride in working for a forward-thinking organization.

The significant indirect paths from service innovation to both financial and non-financial performance via new product performance highlight the central role of new product development in realizing the benefits of service innovation. As such, organizations should prioritize and invest in new product development initiatives as a strategic conduit to maximize the impact of their service innovations. These insights are consistent with previous research that links effective new product performance with enhanced organizational outcomes, both financial and non-financial (Cooper and Kleinschmidt, 1995). By focusing on improving new product performance, firms can better leverage their service innovations to achieve sustained competitive advantages and long-term success.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study provides compelling evidence that new product performance plays a critical role in enhancing organizational performance, both directly and indirectly. The direct positive impact of service innovation on financial performance underscores its importance as a strategic initiative for organizations seeking to improve their bottom line. Furthermore, the findings reveal that while the direct relationship between service innovation and non-financial performance is weak, the indirect effects through new product performance are significantly positive and strong. This indicates that the full benefits of service innovation are realized when it leads to the successful development and performance of new products.

The study also supports the dynamic capability theory by demonstrating how service innovation enhances an organization's ability to develop new products, thereby improving both financial and non-financial performance. This dual impact highlights the interconnected nature of service and product innovation, suggesting that organizations should not view these activities in isolation but as complementary elements of a cohesive innovation strategy. By fostering a culture of innovation and investing in both service and product development, organizations can build dynamic capabilities that drive comprehensive performance improvements.

In conclusion, the findings emphasize the strategic importance of service innovation in achieving sustainable competitive advantage. Organizations are encouraged to integrate service innovation with new product development, adopt a holistic approach to performance measurement, and continuously invest in building an innovative culture. These practices will enable organizations to adapt to changing market conditions, meet evolving customer needs, and achieve long-term success.

5.2 Theoretical implication

The findings align with dynamic capability theory by illustrating that service innovation enhances an organization’s capacity to develop new products, which in turn boosts both financial and non-financial performance. This highlights the critical role of cultivating a culture of innovation, where continuous service innovation can lead to the creation of successful new products, driving overall performance gains. Moreover, the study contributes to the innovation literature by empirically demonstrating the interconnection between service innovation and new product development, affirming that service innovation can catalyze product innovation. This reinforces the synergistic relationship between different forms of innovation, offering valuable insights into how organizations can leverage both for comprehensive performance improvements.

5.3 Practical implication

The findings of this study offer valuable practical implications for managers and organizational leaders seeking to enhance both financial and non-financial performance through service innovation. First, managers should prioritize service innovation as a strategic initiative by fostering a culture that encourages creativity and continuous improvement, enabling organizations to build dynamic capabilities that swiftly adapt to market shifts and customer needs. This includes investing in employee training, promoting cross-functional collaboration, and creating a supportive environment for experimentation. Additionally, service innovation should be integrated with new product development to ensure

alignment between service and product innovation efforts, facilitated by regular communication and customer-driven feedback loops. Adopting advanced technologies to support innovation processes is crucial for efficiency. Lastly, a comprehensive performance measurement system is essential, incorporating both financial and non-financial metrics such as customer satisfaction, employee engagement, and brand reputation. Balanced scorecards or integrated reporting frameworks can provide a complete view of performance, helping organizations fully realize the benefits of service innovation and secure a competitive, sustainable position in the long term.

5.4 Limitations of The Study and Further Research

This study is constrained by its reliance on self-reported data, which introduces the potential for response bias, as participants may provide socially desirable answers rather than objective responses. Additionally, the use of purposive sampling restricts the generalizability of the results to other banking institutions across Ghana, as the findings may not reflect the experiences or practices of a broader range of banks. Future research could address these limitations by expanding the sample size and employing more diverse sampling techniques, such as random or stratified sampling, to include a wider variety of banks. This would enhance the robustness and generalizability of the study's findings, providing a more comprehensive view of the banking sector.

Based on the study's findings, several areas are recommended for future research. First, future studies could investigate which specific elements of service innovation, such as customer involvement, technological advancements, or process improvements, have the most significant impact on new product performance. Identifying these key drivers would offer deeper insights into optimizing service innovation strategies. Additionally, organizational culture and leadership styles are likely to play a crucial role in how effectively service innovation initiatives are implemented and how they translate into improved product performance. Examining these moderating factors can provide a more comprehensive understanding of the conditions under which service innovation enhances both financial and non-financial performance. Further research could also explore how these dynamics vary across different industries, identifying sector-specific best practices for integrating organizational culture, leadership, and innovation.

REFERENCES

Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of physics: Conference series* (Vol. 890, No. 1, p. 012163). IOP Publishing.

Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International research journal of finance and economics*, *39*(6), 215-228.

Afriyie, S., Du, J., & Ibn Musah, A. A. (2019). Innovation and marketing performance of SME in an emerging economy: the moderating effect of transformational leadership. *Journal of Global Entrepreneurship Research*, *9*(1), 40.

Arthur, S. N. A., Ahenkrah, K., & Asamoah, D. (2012). Improving service quality through innovative service systems: The case of the Ghanaian telecom industry. *Journal of Marketing Development and Competitiveness*, *6*(3), 55-67.

Asamoah, D. A., & Andoh-Baidoo, F. K. (2018). Enterprise resource planning systems, business process outcomes, and the role of formal and informal controls in organizations: A Sub-Saharan Africa perspective. *Information Systems Management*, *35*(4), 293-308.

Asamoah, J. D., Agyei-Owusu, B., & Ashun, E. F. (2020). Leveraging social networks for service innovation and customer-oriented performance. *Journal of Business & Industrial Marketing*, *35*(8), 1310-1320.

Avlonitis, G. J., Papastathopoulou, P. G., & Gounaris, S. P. (2001). An empirically-based typology of product innovativeness for new financial services: Success and failure scenarios. *Journal of Product Innovation Management: an international publication of the product development & management association*, *18*(5), 324-342.

Barczak, G., Griffin, A., & Kahn, K. B. (2009). Trends and drivers of success in NPD practices: Results of the 2003 PDMA best practices study. *Journal of Product Innovation Management*, *26*(1), 3-23.

Becker, J. M., Cheah, J. H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2023). PLS-SEM's most wanted guidance. *International Journal of Contemporary Hospitality Management*, *35*(1), 321-346.

Belkhaoui, S. (2023). Banking system and economic growth linkages in MENA region: Complementarity and substitutability between Islamic and conventional banking. *Journal of Islamic Accounting and Business Research*, *14*(2), 267-288

Bello, D. C., Lohtia, R., & Sangtani, V. (2004). An institutional analysis of supply chain innovations in global marketing channels. *Industrial Marketing Management*, *33*(1), 57-64.

Berry, L. L., Shankar, V., Parish, J. T., Cadwallader, S., & Dotzel, T. (2006). Creating new markets through service innovation. *MIT Sloan Management Review*, *47*(2), 56-63.

Bhutto, S. A., Jamal, Y., & Ullah, S. (2023). FinTech adoption, HR competency potential, service innovation and firm growth in banking sector. *Heliyon, 9*(3), e13967.

Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association, 22*(2), 27-30.

Bryman, A. (2016). *Social Research Methods*. Oxford University Press.

Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management, 31*(6), 515-524.

Calantone, R. J., Chan, K., & Cui, A. S. (2006). Decomposing product innovativeness and its effects on new product success. *Journal of Product Innovation Management, 23*(5), 408-421.

Carbonell, P., Rodríguez-Escudero, A. I., & Pujari, D. (2009). Customer involvement in new service development: An examination of antecedents and outcomes. *Journal of Product Innovation Management, 26*(5), 536-550.

Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. Sage Publications.

Chen, J. S., Tsou, H. T., & Huang, A. Y. (2009). Service delivery innovation: Antecedents and impact on firm performance. *Journal of Service Research, 12*(1), 36-55.

Chen, K. H., Wang, C. H., Huang, S. Z., & Shen, G. C. (2016). Service innovation and new product performance: The influence of market-linking capabilities and market turbulence. *International journal of production economics, 172*, 54-64.

Chen, Y., Wang, Y., Nevo, S., Jin, J., Wang, L., & Chow, W. S. (2014). IT capability and organizational performance: The roles of business process agility and environmental factors. *European Journal of Information Systems, 23*(3), 326-342.

Cooper, R. G. (2011). Winning at new products: Creating value through innovation (4th ed.). *Basic Books.*

Cooper, R. G., & Kleinschmidt, E. J. (1995). Benchmarking the firm's critical success factors in new product development. *Journal of Product Innovation Management: An International Publication of the Product Development & Management Association, 12*(5), 374-391.

Cooper, R. G., & Kleinschmidt, E. J. (2007). Success factors for new financial services: Insights from a study of bank product innovations. *Journal of Product Innovation Management, 24*(5), 430-442.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Damanpour, F., & Aravind, D. (2012). Organizational structure and innovation revisited: From organic to ambidextrous structure. *Innovation: Management, Policy & Practice, 14*(3), 129-141.

Damanpour, F., & Evan, W. M. (1984). Organizational innovation and performance: the problem of" organizational lag". *Administrative science quarterly*, 392-409.

Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management, 17*(3), 215-236.

Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies, 46*(4), 650-675.

Den Hertog, P., Van der Aa, W., & De Jong, M. W. (2010). Capabilities for managing service innovation: towards a conceptual framework. *Journal of service Management, 21*(4), 490-514.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10-11), 1105-1121.

El Chaarani, H., Vrontis, P. D., El Nemar, S., & El Abiad, Z. (2022). The impact of strategic competitive innovation on the financial performance of SMEs during COVID-19 pandemic period. *Competitiveness Review: An International Business Journal, 32*(3), 282-301.

Feng, C., Ma, R., & Jiang, L. (2021). The impact of service innovation on firm performance: a meta-analysis. *Journal of Service Management, 32*(3), 289-314.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382–388.

Fowler Jr, F. J. (2013). *Survey research methods*. Sage publications.

Griffin, A., & Page, A. L. (1993). An interim report on measuring product development success and failure. *Journal of Product Innovation Management, 10*(4), 291-308.

Gök, O., & Peker, S. (2017). Understanding the links among innovation performance, market performance and financial performance. *Review of managerial science, 11*, 605-631.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing, 69*(4), 210-218.

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial management & data systems*, *117*(3), 442-458.

Henard, D. H., & Szymanski, D. M. (2001). Why some new products are more successful than others. *Journal of Marketing Research*, *38*(3), 362-375.

Hogan, S. J., Soutar, G. N., McColl-Kennedy, J. R., & Sweeney, J. C. (2011). Reconceptualizing professional service innovation. *Journal of Service Research*, *14*(3), 323-338.

Huang, S. (2014). The impact of financial leverage on firm performance: A case of non-financial firms in the United States. *Journal of International Business Research*, *13*(1), 45-60.

Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, *33*(5), 429-438.

Islam, M. M. (2023). Innovations and service firms' performance: a firm-level mediating and moderating effects analysis for India. *International Journal of Innovation Science*, *15*(3), 385-405.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard—Measures that drive performance. *Harvard Business Review*, *70*(1), 71-79.

Kilay, F., Kurnia, S., & Hilmi, N. (2022). E-payment, e-commerce, and supply chain performance in Indonesian MSMEs. *Journal of Business Research*, *139*, 135-143.

Kindström, D., & Kowalkowski, C. (2014). Service innovation in product-centric firms: A multidimensional business model perspective. *Journal of Business & Industrial Marketing*, *29*(2), 96-111.

Kumar, R., Saxena, S., Kumar, V., Prabha, V., Kumar, R., & Kukreti, A. (2024). Service innovation research: a bibliometric analysis using VOSviewer. *Competitiveness Review: An International Business Journal*, *34*(4), 736-760.

Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-based dentistry*, *7*(1), 24-25.

Lim, S. T., Preis, M. W., Lee, C. K., Mangematin, V., & Kim, M. J. (2021). The influence of open innovation activities on non-financial performance in the cultural tourism content industry. *Current Issues in Tourism*, *24*(10), 1340-1344.

Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. *MIS Quarterly*, *39*(1), 155-175.

Lütjen, H., Schultz, C., Tietze, F., & Urmetzer, F. (2019). Managing ecosystems for service innovation: A dynamic capability view. *Journal of Business Research*, *104*, 506-519.

Maglio, P. P., & Spohrer, J. (2008). Fundamentals of service science. *Journal of the Academy of Marketing Science*, *36*(1), 18-20.

Mahr, D., Lievens, A., & Blazevic, V. (2014). The value of customer cocreated knowledge during the innovation process. *Journal of Product Innovation Management*, *31*(3), 599-615.

Matekenya, W., & Moyo, C. (2022). Innovation as a driver of SMME performance in South Africa: a quantile regression approach. *African Journal of Economic and Management Studies*, *13*(3), 452-467.

Matear, S., Gray, B. J., & Garrett, T. (2004). Market orientation, brand investment, new service development, market position and performance for service organisations. *International Journal of Service Industry Management*, *15*(3), 284-301.

Melton, H. L., & Hartline, M. D. (2010). Customer and employee co-creation of radical service innovations. *Journal of Service Research*, *13*(3), 311-326.

Menor, L. J., & Roth, A. V. (2008). New service development competence and performance: An empirical investigation in retail banking. *Production and Operations Management*, *17*(3), 267-284.

Menor, L. J., Tatikonda, M. V., & Sampson, S. E. (2002). New service development: Areas for exploitation and exploration. *Journal of Operations Management*, *20*(2), 135-157.

Molina-Castillo, F. J., & Munuera-Aleman, J. L. (2009). The joint impact of quality and innovativeness on short-term new product performance. *Industrial Marketing Management*, *38*(8), 984-993.

Nwachukwu, C., & Vu, H. M. (2022). Service innovation, marketing innovation and customer satisfaction: Moderating role of competitive intensity. *Sage Open*, *12*(2), 21582440221082146.

O'Cass, A., & Sok, P. (2013). Exploring the relationships between customer satisfaction, service quality, and financial performance. *Journal of Services Marketing*, *27*(2), 117-129.

Oke, A. (2007). Innovation types and innovation management practices in service companies. *International journal of operations & Production management*, *27*(6), 564-587.

Ordanini, A., & Parasuraman, A. (2011). Service innovation viewed through a service-dominant logic lens: a conceptual framework and empirical analysis. *Journal of Service Research*, *14*(1), 3-23.

Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patricio, L., & Voss, C. A. (2015). Service research priorities in a rapidly changing context. *Journal of Service Research*, *18*(2), 127-159.

Peters, T., Teece, D. J., Neely, A., & Gregory, M. (2019). Dynamic capabilities and organizational performance: A review of theoretical foundations and empirical evidence. *Research-Technology Management, 62*(3), 18-27.

Phan, T. T. A. (2019). Does organizational innovation always lead to better performance? A study of firms in Vietnam. *Journal of Economics and Development*, *21*(1), 71-82.

Price Water Coopers (2023). *Post-DDEP: how do banks intend to build back? 2023 PwC Ghana Banking Survey Report.* Retrieved on 23 June 2024 from *https://www.pwc.com/gh/en/publications/banking-survey.html*

Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation, 30*(1), 65-75.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management, 35*(3), 718-804.

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing, 26*(4), 441-457.

Rushchyshyn, N., Mulska, O., Nikolchuk, Y., Rushchyshyn, M., & Vasyltsiv, T. (2021). The impact of banking sector development on economic growth: Comparative analysis of Ukraine and some EU countries. *Investment Management & Financial Innovations, 18*(2), 193.

Sarin, S., & McDermott, C. (2003). The effect of team leader characteristics on learning, knowledge application, and performance of cross-functional new product development teams. *Decision sciences, 34*(4), 707-739.

Soosay, C. A., & Hyland, P. W. (2005). A decade of supply chain strategies. *International Journal of Operations & Production Management*, *25*(8), 745-754.

Sorescu, A. B., & Spanjol, J. (2008). Innovation's effect on firm value and risk: Insights from consumer-packaged goods. *Journal of Marketing, 72*(2), 114-132.

Sroufe, R., & Gopalakrishna-Remani, V. (2019). Management, social sustainability, reputation, and financial performance relationships: An empirical examination of US firms. *Organization & Environment*, *32*(3), 331-362.

Storey, C., & Hughes, M. (2013). The relative impact of culture, strategic orientation and capability on new service development performance. *European Journal of Marketing, 47*(5/6), 833-856.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319-1350.

Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies, 45*(1), 8-37.

Teece, D. J. (2016). Dynamic capabilities and entrepreneurial management in large organizations: Toward a theory of the (entrepreneurial) firm. *European Economic Review, 86*, 202-216.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, *51*(1), 40-49.

Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, *24*(3), 359-368.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Tidd, J., & Bessant, J. (2020). *Managing innovation: Integrating technological, market, and organizational change* (6th ed.). Wiley.

Vehovar, V., Toepoel, V., & Steinmetz, S. (2016). *Non-probability sampling* (Vol. 1, pp. 329-45). The Sage handbook of survey methods.

Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the academy of marketing science*, *44*, 119-134.

Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). New York: Harper and Row.

Yen, H. R., Wang, W., Wei, C. P., Hsu, S. H. Y., & Chiu, H. C. (2012). Service innovation readiness: Dimensions and performance outcome. *Decision Support Systems*, *53*(4), 813-824.

Zhang, Y., & Li, H. (2010). Innovation search of new ventures in a technology cluster: The role of ties with service intermediaries. *Strategic management journal*, *31*(1), 88-109.

Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing, 69*(2), 42-60.

Zirger, B. J., & Maidique, M. A. (1990). A model of new product development: An empirical test. *Management Science, 36*(7), 867-883.