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SERVICE SYSTEM DESIGN ALIGNMENT AND ORGANIZATIONAL PERFORMANCE OF SMES IN RIVERS STATE, NIGERIA

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Abstract

The study studied the association between service system design alignment and organisational performance of small and medium sized companies (SME's) in Rivers State, Nigeria. The research design was cross sectional and the population comprised 300 registered SMEs in Rivers State, Nigeria, especially those participating in service orientated and trade related activities. A sample of 171 respondents was selected from a population using stratified random sampling procedures. Structured questionnaires were used for data collection and analyses were conducted using Partial Least Square – Structural Equation Modelling (PLS-SEM) with SmartPLS version 4.0 software. Process integration and standardisation revealed as a prominent driver of operational performance – the link was big and clearly meaningful. It also had a favourable impact on consumer satisfaction; however, it was relatively smaller. The implication of this pattern is that there is ultimately a consumer impact when internal procedures are made more structured and consistent, but the most immediate and dramatic impact is internal, on how efficiently and reliably the firm runs from day to day. The alignment of technology & tools also has significant positive advantages with greater impact on customer satisfaction than operational performance. The model explained 54.3% of the variance in operational performance and 46.5% of the variance in customer satisfaction, which means the predictive accuracy is significant. The study reveals that achieving sustainable competitiveness by SMEs in Rivers State should be integrated with standard workflow processes and alignment of technology instruments with organisational objectives. The bottom line is rather clear: when processes are linked and standardised, waste is reduced, services are more reliable and it's easier to do business with the consumer. For SME

owners and managers this suggests a real priority – investing time and effort in achieving consistency and structure to the way operations are run is not an overhead cost, it is one of the more direct routes to cutting out the inefficiencies and delays that quietly undermine performance. They need clear workflows and documented procedures that make the task predictable and consistent.

Keywords: Service System Design Alignment, Process Integration & Standardisation, Technology & Tools Alignment, Organisational Performance, Operational Performance, Customer Satisfaction, SMEs

Introduction

Organisational performance is a very critical issue to small and medium-sized firms (SMEs) in Rivers State, Nigeria because of the importance of SMEs to the generation of employment, poverty alleviation and diversification of the economy. In view of the intense competition, infrastructure challenges and increasing customer expectations, operational success and customer happiness are key success criteria for this region. It has been demonstrated repeatedly that SMEs play an important role in the Nigerian economy with high contributions to GDP and job creation. Yet, their success is sometimes hampered by shortcomings in service delivery and a gap between organisational processes and strategic objectives (PwC, 2024). For SMEs in Rivers State it is very important to improve on organisational performance for them to survive and sustain their contribution to the local economy.

Aligning the service system design is a crucial facilitator of organisational performance. It is the synchronisation of processes, technology, and tools with organisational objectives to attain efficiency and effectiveness (Maglio & Spohrer, 2013). When SMEs take the time and effort to standardise and integrate their processes, the benefits are tangible and measurable – less redundancy, more predictable results, and services arriving to customers when they are expected to (Agu et al., 2024). The same goes on the technology front: when the digital tools are intentionally matched with what the business is seeking to achieve, they become real drivers of productivity and customer happiness rather than pricey add-ons that never fully deliver on their promise (Edim et al., 2025).

PwC (2021) states that SMEs who actively adopted tools such as ERP systems, CRM platforms, and e-payment solutions beat SMEs that did not make that change regularly in terms of operational effectiveness. The tools themselves are less important than the motive behind their adoption – firms that employ technology for a specific purpose tend to derive considerably more benefit from it than those that adopt it just because everyone else seems to be.

As Gustafsson, Snyder and Witell (2020) put it, “zooming out to the global picture, service system design alignment, getting processes, technology and organisational goals working in the same direction has been consistently linked to stronger performance across different markets and business contexts, especially when it comes to running operations efficiently and keeping the customer experience at the center of how the business is designed.”. According to Maglio et al. (2009), service systems are a configuration of people, technology and procedures that jointly provide value for customers and performance for organisations. Similarly, Bowen and Youngdahl (2018) state that standardising processes leads to less unpredictability, more predictability, and better customer experiences. Also, the use of

technology in service processes has been found to increase service speed, accuracy, and responsiveness towards customers (Vargo & Lusch, 2016). These conceptual reasons indicate that the alignment of service system design is a significant antecedent of organisational performance. However, the application of service systems to Nigerian SMEs is typically hampered by disjointed processes, low level of technology uptake and poor fit between service systems and organisational goals (Eze et al., 2021). Bitner, Ostrom and Morgan (2008) studied the relationship between service process redesign and performance outcomes in service organisations and stressed the significance of process integration for service quality and customer satisfaction. Maglio and Spohrer (2013) showed that the operational efficiency of the service delivery is increased by the use of aligned technologies.

The literature has stressed innovation, dynamic capabilities and organisational justice as antecedents to performance (Esator et al., 2025; Thomas & Rufeela, 2020), but has largely ignored the contribution of service system design alignment via process integration, standardisation and technology alignment in affecting organisational performance in SMEs. The difference is more pronounced in Rivers State where SMEs face peculiar issues of resource restrictions, poor infrastructure and poor customer satisfaction. Thus, this study intends to fill this vacuum by examining the association between service system design alignment and organisational performance of SMEs in Rivers State, Nigeria with particular reference to operational performance and customer satisfaction.

Statement of the Problem

SMEs are crucial to the Nigerian economy, yet SMEs in Rivers State still endure poor organisational performance. Common problems are operational inefficiencies, poor customer satisfaction, and loss of competitiveness (PwC, 2024).

The poor fit of service systems is responsible for a large part of the underperformance of SMEs. Processes tend to be put together ad hoc and inconsistently, with little standardisation to back them up and the results are predictable: delays build up, efforts are repeated and consumers rarely get the same level of service twice (Agu et al., 2024). The scenario on the technological front is equally worrying. Many SMEs rely on old systems and manual modes of working that were never meant to meet today's requirements, resulting in low productivity and very little ability to react swiftly to changing conditions (Edim et al., 2025). When the tools a business utilises aren’t actually relevant to what that organization is trying to do, satisfying consumer expectations becomes a chore — and staying ahead of a changing market becomes considerably tougher

There is a growing body of literature demonstrating that alignment of service system design with organisational goals can have a considerable impact on performance (Maglio & Spohrer, 2013; Gustafsson et al., 2020). However, the majority of this data derives from broader or more mature business contexts. The empirical picture is scarce with regard to SMEs in Rivers State in particular. There has been a lot of research in this domain but looking elsewhere for the answers, concentrating on innovation, dynamic capabilities and organisational justice as the main determinants of success (Esator et al., 2025; Thomas & Rufeela, 2020). This study fills this gap. However, the exact influence of service system design alignment on operational performance and customer satisfaction in SMEs is still not well researched.

This knowledge gap generates ambiguity for managers and policy makers in their drive to improve SME performance in Rivers State. Therefore, this study aims at addressing the problem by investigating the effect of service system design alignment on organisational performance with a focus on operational performance and customer satisfaction.

Research Objectives

The specific objectives are;

1. To examine the relationship between process integration & standardization and operational performance of SMEs in Rivers State, Nigeria.

2. To examine the relationship between technology & tools alignment and operational performance of SMEs in Rivers State, Nigeria.

3. To examine the relationship between process integration & standardization and customer satisfaction of SMEs in Rivers State, Nigeria.

4. To examine the relationship between technology & tools alignment and customer satisfaction SMEs in Rivers State, Nigeria.

Research Questions

The following research questions will guide this study;

1. What is the relationship between process integration & standardization and operational performance of SMEs in Rivers State, Nigeria?
2. What is the relationship between technology & tools alignment and operational performance of SMEs in Rivers State, Nigeria?
3. What is the relationship between process integration & standardization and customer satisfaction of SMEs in Rivers State, Nigeria?
4. How does the alignment of technology & tools correlate with customer satisfaction of SMEs in Rivers State, Nigeria?

Research Hypotheses

The following null hypotheses served as a tentative answer to the research questions.

Ho_1: There is no significant relationship between process integration & standardization and operational performance of SMEs in Rivers State, Nigeria.

Ho_2: There is no significant relationship between technology & tools alignment and operational performance of SMEs in Rivers State, Nigeria.

Ho_3: There is no significant relationship between process integration & standardization and customer satisfaction of SMEs in Rivers State, Nigeria.

Ho_4: There is no significant relationship between technology & tools alignment and customer satisfaction of SMEs in Rivers State, Nigeria.

Review of Literature

This study is anchored on the Resource-Based View (RBV) theory. RBV posits that organizations gain competitive advantage by leveraging unique, valuable, and inimitable resources (Barney, 1991). Service system design alignment, process integration, and technology alignment represent strategic resources that enable SMEs to deliver superior performance outcomes. These resources can be effectively utilized by the SMEs in Rivers State to improve operational efficiency and customer satisfaction thereby maintaining competitiveness.

Conceptual Framework

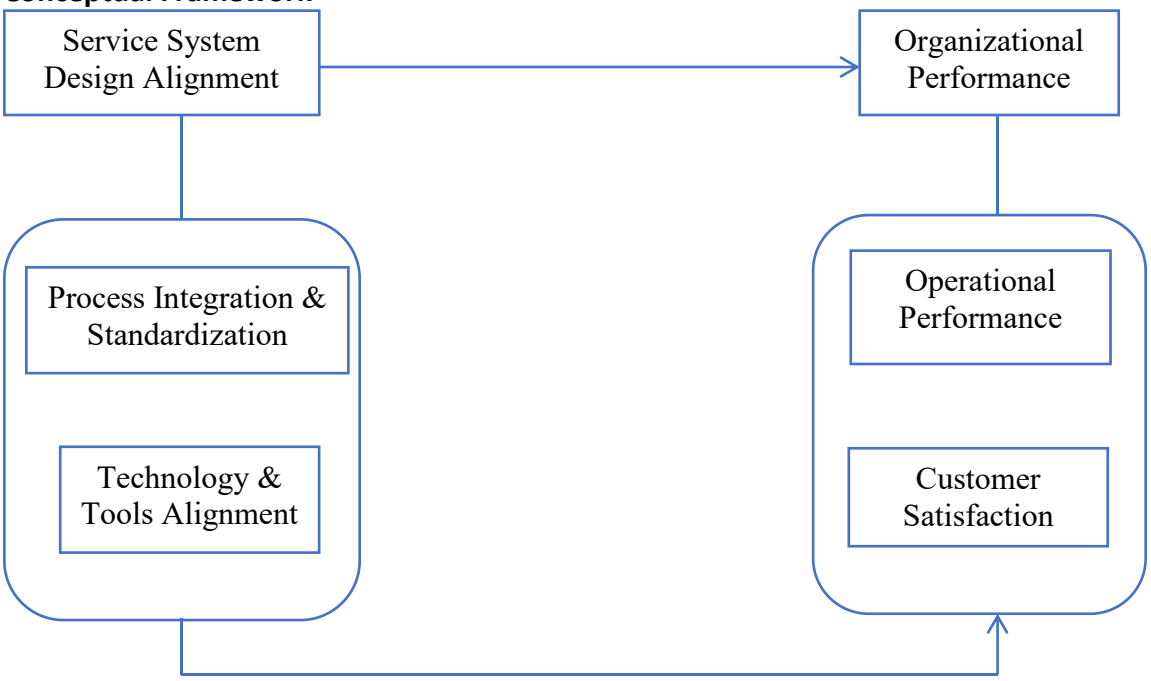


Figure 1: Conceptual Framework

Source: The dimensions of Service System Design Alignment were adapted from Bitner, Ostrom and Morgan (2008), while the measures of Organizational Performance were adapted from Homburg and Giering (2001)

Concept of Service System Design Alignment

In essence, service system design alignment is ensuring that a company's people, processes and technology are all aimed at the same goal – not just coexisting, but actively working together to produce consistent and reliable service. This was nicely articulated by Maglio and Spohrer (2013). The true difficulty is not to design amazing workflows or to invest in powerful technology in isolation, but to integrate them so that they cease working in silos and start delivering meaningful value together.

And the difference is clear when that link is made. Internal coordination increases, the kind of failures that arise from miscommunication or fragmented systems become significantly less common, and customers end up with a more reliable, predictable experience (Bitner, Ostrom, & Morgan, 2008).

For SMEs, this is not just a nice-to-have – it's arguably critical. Smaller organisations usually have more lean, informal structures, meaning there's far less room to absorb the waste that comes with disconnected systems. Being aligned implies that what's happening on the ground day to day is genuinely reflective of where the business is striving to go. This can be seen plainly in practice. Owomoyela (2021) saw this himself in Nigerian SMEs. Companies who had previously considered IT as a back-office function, divorced from the larger picture, began to realise significant profits once they started aligning their technology investments with their true strategic objective. Efficiency didn't just inch up marginally, it increased in ways that translated into greater competitiveness and real capability for growth.

Process Integration & Standardization

Process integration and standardization may sound like corporate jargon, but the premise is actually quite simple: ensure that work is done the same way throughout the firm and not differently depending on who is doing it or what department you are in. When teams are left to their own devices, they inevitably establish their own patterns, and while this may function great inside a team, it poses major issues when those teams need to work together.

Getting this correctly is more important than many SMEs realise. Agu et al. (2024) discovered that Nigerian small enterprises who invested in standardizing their procedures were significantly more competitive – and it wasn't difficult. Less delays. Quality is more dependable. Customers getting the same consistent experience, not a lottery

Technology & Tools Alignment

Technology alignment is about fit – making sure the digital tools you run your business on were picked because they actually fit how your organization works and where it wants to go, not because they looked good on a brochure or were highly recommended in the abstract. Without that fit, the tools that were designed to make things faster and easier become friction, and the firm finds itself going slower than it did before.

The science pretty much backs this up. Edim et al. (2025) proved that the digital transformation had a positive and significant impact on the performance of SMEs in Nigeria. This result is not just about the value of technology but about the effect when companies adopt it with authentic purpose and alignment behind the decision. The ERP systems and the mobile payment platforms made enterprises more responsive and adaptable to changing needs. That's what most business owners discover in practice: when the technology fits the workflow, service speeds up, errors go down, and customer interactions smooth out. When it doesn't fit, you get bottlenecks that are often worse than the problem the technology was designed to solve (Maglio et al., 2009).

The finding was further complicated by Ukoha et al. (2025) who demonstrated that SMEs in South-South Nigeria that adopted technological innovation, either through social media marketing or enterprise resource planning, exhibited real performance increases. Both studies speak to the same underlying truth: it's not about technology for technology's sake. It's about selecting the right tools that really match where the organization is headed and deploying them in a way that supports, not disrupts, the people who are using them every day.

Concept of Organizational Performance

Ultimately, organisational performance is about whether a business is actually delivering – not simply keeping afloat, but attaining the results it set out to achieve. It means working well, producing a profit that keeps the business going and clients who are really happy, not just served.

Academics have known for a long time that performance is not one thing you can capture with one number. Venkatraman and Ramanujam (1986) argued that it is financial and non-financial, and Richard et al. (2009) extended that and characterised it as a multidimensional construct, consisting of internal operational performance as well as external customer perception of the business.

For SMEs this is a rather practical method. Financial measures such as market share or return on investment can seem a long way from the day-to-day realities of running a small

business. What really matters and is a better indicator of whether a SME is doing well or not is if operations are running smoothly and if consumers keep coming back. These two things, operational efficiency and customer satisfaction, are not simply performance metrics in an academic sense. They are the best evidence that a small firm is providing value and standing apart in a competitive market

Operational Performance

Operational performance is really just asking a simple question: how well does the firm truly run day-to-day? Can it make effective use of what it has, can it move at a reasonable speed, can it keep expenses from spiralling, can it show up reliably for the people counting on it? These things are simple, but doing them right all the time is easier said than done — especially for smaller organisations working on thin margins and with little room for mistake.

What research tends to discover is that organisations that do well consistently are rarely doing anything strange — they've just taken the time to introduce some structure and consistency to how work gets done. Agu et al. (2024) discovered that Nigerian SMEs that standardised use of processes wasted less and moved faster, and it wasn't because they had larger resources or bigger teams. It was that they weren't wasting half their efforts redoing work that had already been done, or putting out fires that properly planned systems would have prevented from happening in the first place. Slack and Brandon-Jones (2019) noted something similar: when processes are linked and technology is aligned to the work it is intended to do, operational outcomes are significantly improved. SMEs that take designing their service systems seriously tend to get more done, make fewer mistakes and keep the ball rolling.

Customer Satisfaction

At the end of the day, customer satisfaction is whether the people who a firm services believe that what they got was what they'd hoped for, or better yet, even better than they hoped for. It sounds simple. But it's not easy to do this every single time. The true engines of contentment are not dramatic gestures or showy goods, but consistency and dependability—the calm assurance that a consumer gets from knowing they can count on a business to give the same quality every time" (Parasuraman, Zeithaml, and Berry, 1988).

Bitner et al. (2008) observed that when service systems are aligned, they are much more likely to maintain this type of reliability. Gustafsson, Snyder and Witell (2020) took this one step further and said that companies that combine alignment with authentic service innovation do more than satisfy expectations, they create experiences that really connect with the minds of customers. Practically bringing this to life in the Nigerian SME setting was Edim et al. (2025) who found that organisations that incorporated digital technologies with standardised processes became notably more dependable and that dependability, more than anything else, is what kept customers delighted and coming back.

Empirical Review

Owomoyela (2021) was trying to understand something that many Nigerian SME owners probably battle with but cannot quite put their finger on: does it really change anything when your IT systems are designed around your business plan rather than running parallel to it as an afterthought? The research adopted a survey research design. A five-stage sampling technique was adopted to get responses from 400 firms in Oyo State. Data were collected through

structured questionnaires and hypotheses were tested through chi-square test. The results were self-evident. Aligning IT with business strategy had a meaningful, quantifiable effect on operational efficiency. The study revealed that the alignment of service system design is not a luxury or good to have for Nigerian SMEs, it is among the most significant aspects in determining operational performance.

Edim, Gbadegesin, Omigbodun, and Adeniran (2025) researched the real effect of digital transformation on SMEs' performance in Nigeria not just theoretically but in actual experience. The study investigated the extent to which alignment of technology and tools to service delivery objectives influence operational effectiveness and customer satisfaction. The researchers used purposive sampling to choose 300 SMEs The researchers collected data using structured questionnaires, and applied correlation and regression analysis to make sense of what the numbers were telling them. The feedback was quite clear: digital tools, especially ERP systems and mobile payment platforms, were really important, both in terms of how efficiently firms ran internally and how delighted their consumers were. The conclusion of the study was stark, but in the greatest sense of the word. In Nigeria's fast-paced business environment, aligning technology with organisational goals is not a strategic luxury. It is what differentiates enterprises that maintain pace with their environment, from those that are steadily left behind.

Agu, Komolafe, Ejike, Ewim, and Okeke (2024) answered the subject of SME competitiveness from a very different perspective, not through the lens of technology but via the less glamorous but no less crucial question of how labour is designed and executed. The study sought to know if standardisation of the way work is done may significantly increase operational efficiency and customer satisfaction of Nigerian SMEs. The researchers employed questionnaires and regression analysis to investigate the association based on responses from 250 SMEs in Lagos and Abuja selected through stratified random sampling. The results were clear cut. Companies with standardised procedures were more competitive, had less service delays and were more reliable in their delivery to clients. The study provided a strong argument that process integration and standardisation aren't just about being neat and organised — they're pragmatic instruments for creating the sort of consistency that quietly supports both performance and consumer confidence in an organization over time.

Ukoha, Nwankwo and Opara (2025) approached the issue of performance from a different angle by looking specifically at the technological innovation that was being used by SMEs in the South-South Nigeria to improve their performance. They weren't interested in process structure or internal operations, they were interested in the tactics organisations were really deploying – social media marketing, enterprise resource planning systems and such – and what those strategies were accomplishing for overall business outcomes. The study consisted of 399 SMEs using simple random selection. The study utilised a descriptive correlational design and employed correlation analysis to examine the relationship between the variables.

Methodology

This study adopted a cross-sectional survey research design. The population covered 300 registered SMEs operating in Rivers State, Nigeria, particularly those engaged in service-oriented and trade-related activities. A sample size of 171 respondents were drawn from the population using the Taro Yamane (1967) formula with a 5% margin of error and stratified

random sampling technique was employed. Primary data were collected using copies of structured questionnaire designed on a 4-point Likert scale ranging from Strongly Agree (4) to Strongly Disagree (1). Data were analyzed using Partial Least Squares – Structural Equation Modelling (PLS-SEM) with SmartPLS version 4.0.

Table 1: Reliability Test

	Cronbach's Alpha	Composite Reliability
Process Integration & Standardization (PIS)	0.883	0.897
Technology & Tools Alignment (TTA)	0.848	0.854
Operational Performance (OPP)	0.937	0.948
Customer Satisfaction (CUS)	0.889	0.905

All constructs recorded Cronbach's Alpha and Composite Reliability values above the recommended threshold of 0.70, indicating high internal consistency and reliability of the measurement items.

Table 2: Validity Test

Constructs	AVE	CUS	OPP	PIS	TTA
CUS	0.658	**0.811**			
OPP	0.786	0.438	**0.887**		
PIS	0.638	0.395	0.417	**0.799**	
TTA	0.546	0.229	0.312	0.421	**0.739**

Where: PIS = Process Integration & Standardization, TTA = Technology & Tools Alignment, OPP = Operational Performance, CUS = Customer Satisfaction.

All AVE values exceed 0.50, confirming convergent validity. The square roots of AVE (diagonal values) are higher than inter-construct correlations, satisfying the Fornell-Larcker criterion for discriminant validity.

Analysis and Discussion

A total of 171 questionnaires were distributed to SMEs. Out of these, 163 were retrieved, while 160 were valid for analysis after data screening. This represents a response rate of 93.6%.

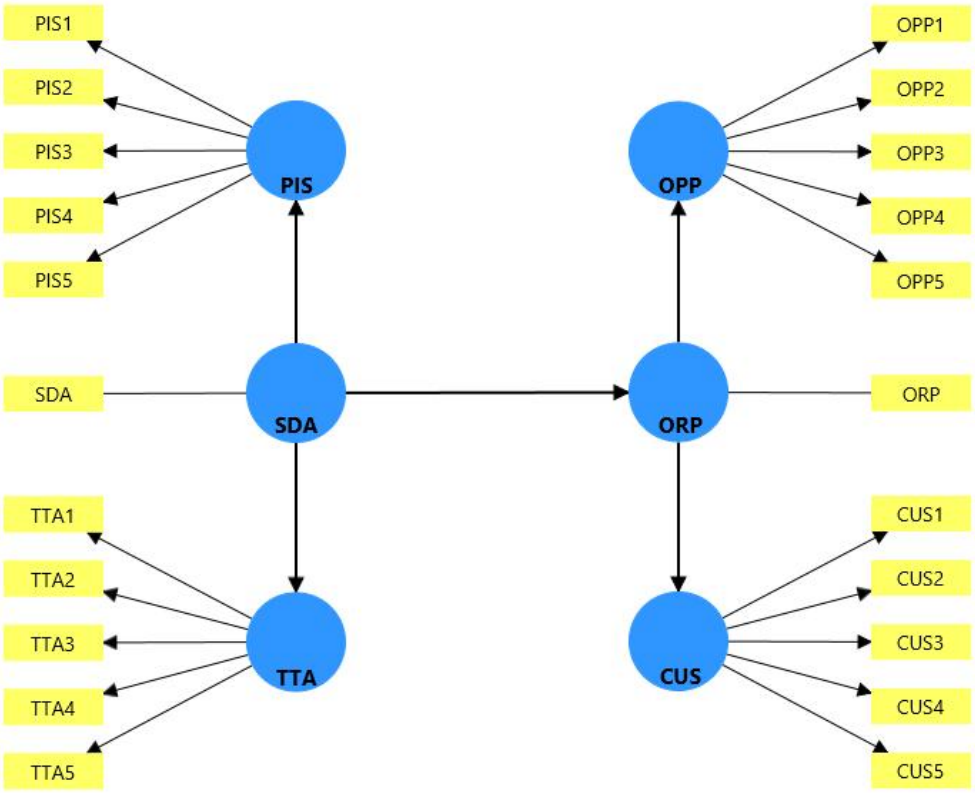


Figure 2: Research Model

The model demonstrates that service system design alignment components (process integration & standardization and technology & tools alignment) act as exogenous variables influencing organizational performance dimensions as endogenous variables (operational performance and customer satisfaction). Where, SDA = System Design Alignment, PIS = Process Integration & Standardization, TTA = Technology & Tools Alignment, ORP = Organizational Performance, OPP = Operational Performance, CUS = Customer Satisfaction.

Hypotheses Testing

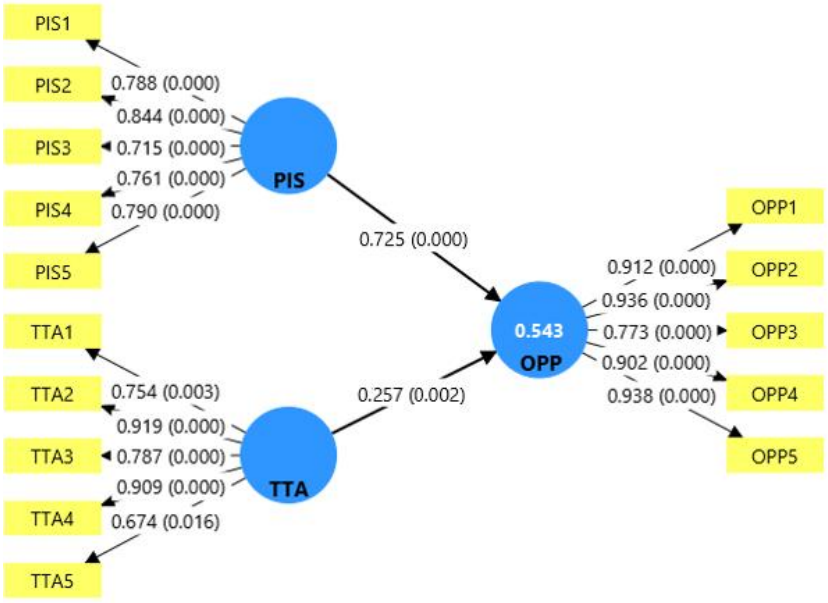


Figure 3: Hypotheses 1 and 2

Figure 3 presents the structural paths between Process Integration & Standardization (PIS) and Operational Performance (OPP), as well as between Technology & Tools Alignment (TTA) and Operational Performance (OPP).

Ho_1: There is no significant relationship between process integration & standardization and operational performance of SMEs in Rivers State, Nigeria.

The path from process integration and standardisation to operational performance was one of the strongest results in the whole investigation, with a beta coefficient of 0.725 (p-value 0.000). This is no trivial result; it suggests a strong and very significant positive link. In practice, the SMEs in Rivers State that have standardised their way of doing things and integrated their processes across the business are reaping big rewards – operations become more efficient, unnecessary duplication is squeezed out, and day-to-day outcomes become more predictable and controllable. Based on this, Ho1 is rejected, demonstrating that process integration and standardisation are key drivers of operational success.

The association between technology and tools alignment and operational success was a little different with a beta of 0.257 and a p-value of 0.002 – indicating a moderate but still statistically significant positive relationship. This effect is true, but it is less than what can be achieved by process integration. SMEs that match their technology choices with their organisational objectives do find measurable increases in productivity and responsiveness – they just shouldn't expect technology alignment alone to carry the entire load. Nevertheless, the rejection of Ho2 confirms that alignment of technology and tools contributes significantly to operational success.

The R2 value of 0.543 indicates that these two factors jointly explain around 54.3% of the variance in operational performance. That is a good share and it makes a strong argument that process integration, standardisation and technology alignment are not peripheral concerns for SMEs in Rivers State, they are among the most significant variables defining how effectively these enterprises are able to run.

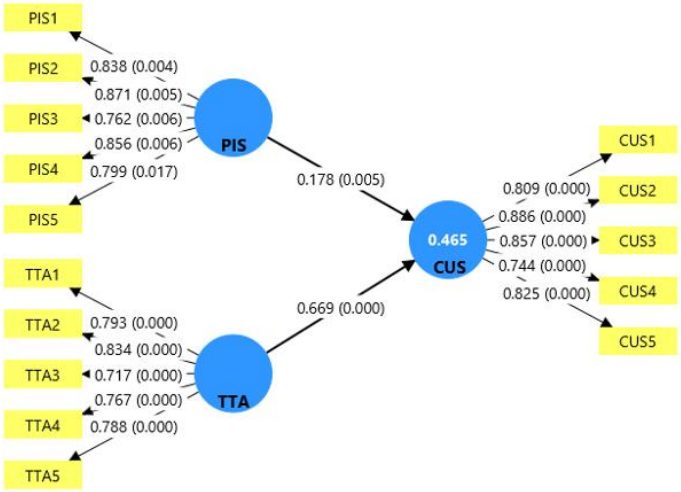


Figure 4: Hypotheses 3 and 4

The structural equation model in Figure 4 illustrates the paths between Process Integration & Standardization (PIS), Technology & Tools Alignment (TTA), and Customer Satisfaction (CUS).

Ho_3: There is no significant relationship between process integration & standardization and customer satisfaction of SMEs in Rivers State, Nigeria.

PIS → CUS (β = 0.178, p = 0.005): This path shows a statistically significant but relatively weak positive relationship. The coefficient value of 0.178 indicates that process integration and standardization contribute to customer satisfaction, but the effect size is modest. The p- value of 0.005 confirms that the relationship is significant at the 1% level. This means that SMEs in Rivers State that adopt standardized workflows and integrate their processes are able to deliver more consistent and reliable services, which improves customer trust and satisfaction. However, the magnitude of the effect suggests that while process integration matters, it is not the dominant driver of customer satisfaction. Therefore, Ho3 is rejected, confirming that process integration and standardization significantly influence customer satisfaction.

Ho_4: There is no significant relationship between technology & tools alignment and customer satisfaction of SMEs in Rivers State, Nigeria.

TTA → CUS (β = 0.669, p = 0.000): This path demonstrates a strong and highly significant positive relationship. The coefficient value of 0.669 indicates that technology and tools alignment has a substantial impact on customer satisfaction. The p- value of 0.000 confirms that the relationship is highly significant. This implies that SMEs that align their technological tools—such as ERP systems, mobile applications, and social media platforms—with organizational objectives are better able to meet customer expectations, provide faster responses, and deliver higher service quality. Compared to process integration, technology alignment exerts a much stronger influence on customer satisfaction. Therefore, Ho4 is rejected, confirming that technology and tools alignment significantly improves customer satisfaction.

R^2 for CUS = 0.465: The R^2 value inside the CUS construct shows that together, process integration & standardization and technology & tools alignment explain about 46.5% of the variance in customer satisfaction. This is a moderate level of predictive accuracy, indicating that these two factors are important drivers of customer satisfaction, though other external factors may also play a role.

Discussion of Findings

Process Integration & Standardization and Operational Performance

One of the more important discoveries to come out of this study was the relationship between process integration and standardisation and operational performance . The connection was positive and significant with a beta coefficient of 0.725 and p-value of 0.000. In operational words, this means that SMEs that have actively looked to standardise how work is carried out and integrate their processes across different areas of the organization are gaining tangible benefits. Things flow better, unnecessary duplication quietly disappears and day to day outcomes become something the firm can genuinely count on rather than guess at.

This is not an isolated finding. Agu et al. (2024) reached quite similar conclusions, demonstrating that standardisation of processes provided Nigerian SMEs with a considerable competitive advantage – mostly by reducing delays and making service delivery tighter and more reliable. This strikes a strong chord with what was found here among Rivers State SMEs. It underlines the view that embedding consistent, structured procedures into the fabric of day-to-day operations is far more than an administrative exercise – it is one of the more direct levers a business has on its own performance.

This is further strengthened by Owomoyela (2021). The study indicated that Nigerian SMEs who fitted their IT strategy with their organisational goals had significant improvements in operational efficiency. The two studies together highlight a common denominator: whether the talk is about process design or strategic alignment, it's structure and consistency that bridge the divide between what a firm aspires to achieve and what it really provides

Technology & Tools Alignment and Operational Performance

The analysis also found a strong positive link between technology and tools alignment and operational performance ($\beta = 0.257$; $p = 0.002$). Admittedly, the effect is smaller than what is observed with process integration, but substantial nonetheless. SMEs that make a conscious choice about the technology they deploy – ensuring it truly fits their workflows and helps them achieve their organisational objectives – do notice genuine increases in productivity and how quickly and efficiently they can respond to demands.

Edim et al. (2025) discovered the same thing essentially. Their study found that digital tools, especially, enterprise resource planning (ERP) systems and mobile payment platforms did make a difference in the operational performance of Nigerian SMEs. Their finding that technology alignment is not a peripheral concern but a significant driver of SME success in fast-changing business contexts goes comfortably beside what this study revealed in Rivers State.

Ukoha et al. (2025) contribute to the picture. Their study showed that technology developments such as ERP systems have a beneficial effect on SME performance with operational efficiency being one of the most obvious beneficiaries. Together, the two studies suggest something that this study's findings reflect fairly directly: the value of technology for a SME lies not in how advanced or expensive it is, but in how well it fits with what the business is actually attempting to do. When that alignment is there, the operational gains usually follow

Process Integration & Standardization and Customer Satisfaction

The investigation also showed a link between process integration and standardisation and customer satisfaction with a beta coefficient of 0.178 and a p-value of 0.005. The effect is

less dramatic than some of the other findings that are reported in this study, but it is statistically significant and speaks an important story: When SMEs invest in establishing standardised procedures in the way they work, it's noticed by consumers – not necessarily in big ways, but in the steady, continuous dependability that creates trust over time. The service is performed as it should be, the experiences are the same from one time to the next, and clients gain confidence in the business over time.

In direct response, Agu et al. (2024) suggest that the benefits of process standardisation are not limited to internal efficiency but extend to the consumer experience. They observed that predictability and regularity of service delivery are some of the more reliable factors of consumer satisfaction. This finding is consistent with the finding of this study among SMEs in Rivers State, which suggests that the road to more satisfied consumers is not always about showy service enhancements, but rather, it is about showing up the same way, every time.

Owomoyela (2021) gives the context for the argument from a somewhat different position. That study revealed that aligning IT strategy with business goals led to better service outcomes — and while the target was not customer pleasure directly, the conclusion is more than plain enough. When processes are structured and systems are aligned, services are given in a more organised and dependable manner, and the customers are the ultimate beneficiaries of that.

Technology & Tools Alignment and Customer Satisfaction

Perhaps, the most remarkable finding in this study was the association between technology and tools alignment and customer happiness. This relationship was not only significant (beta coefficient = 0.669, p = 0.000), but it was one of the strongest among all the variables investigated. What this indicates is that SMEs that are selective about the digital tools they adopt – whether that's ERP systems, mobile apps or social media platforms – are in a far better position to deliver on what customers actually want: faster responses, consistent quality and a service experience that is seamless rather than frustrating.

This finding is consistent with Edim et al. (2025) who found that digital tools significantly affected customer satisfaction in Nigerian SMEs, mainly by enhancing the delivery of services and the speed at which enterprises could respond to customer demands. The parallel with what was found here in Rivers State is not hard to overlook.

Ukoha et al. (2025) further complete the image. Their research in South-South Nigeria showed that technological innovation has a significant beneficial influence on consumer satisfaction, a finding that supports the general argument that this study contributes to. Customers nowadays, especially in local and regional markets, care how companies apply technology. They notice when a company is built to serve them well and they realise just as quickly when it is not. Taken together, the evidence from these studies demonstrates that for SMEs working in competitive and fast-paced contexts, aligning technology with customer-facing goals is less a strategic decision than it is a minimum requirement for being relevant.

Conclusion

The study finally reveals that serious pursuit and good use of service system design alignment makes a substantial difference to performance of SMEs in Rivers State. Operational efficiency and customer satisfaction were the two variables of performance that responded positively to increased process integration and standardisation and technology alignment. If

anything the evidence would show that the technological side bears a little more weight in delighting clients, but there is a price to pay if you ignore either dimension.

But the study also adds something that the existing literature has lacked: grounded empirical evidence from the specific context of Rivers State, where SMEs face a unique set of pressures: limited resources, gaps in technological adoption, and customers whose expectations are not always being met. This study goes beyond providing academic confirmation, proving that structured processes and aligned technologies can make a difference in both operational performance and customer happiness. It gives SME owners and policy makers something to truly work with.

The practical message is simple. Service system design for SMEs in Rivers State cannot be relegated to the background or considered a minor business concern. Standardising workflows and integrating processes eliminates the kind of inefficiency and inconsistency that gradually eats away at performance over time. Aligning technology with what the organization is really attempting to achieve — rather than embracing tools only for their own sake – generates the responsiveness that today's customers have grown to demand. These together are not merely operational gains. They are the bedrock upon which sustainable competitiveness is formed and through that competitiveness, a more meaningful contribution to the larger economic life of Rivers State and Nigeria as a whole.

Recommendations

1. SMEs should prioritize integrating and standardizing their processes to reduce redundancies, minimize delays, and improve efficiency. Managers should adopt clear workflows and documented procedures to ensure predictability and consistency in operations.
2. SMEs should align technological tools such as ERP systems, mobile payment platforms, and CRM software with organizational objectives. This will enhance productivity, responsiveness, and adaptability, ensuring that technology investments directly support operational goals.
3. SMEs should embed standardized processes into customer-facing activities to ensure reliability and consistency in service delivery. By reducing errors and maintaining uniform standards, SMEs can build customer trust and improve satisfaction levels.
4. SMEs should leverage digital innovations such as social media marketing, mobile applications, and customer relationship management systems to strengthen customer engagement and satisfaction. Aligning these tools with customer needs will enable SMEs to deliver faster responses and higher service quality.

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