ISSN: 5280-481X | Volume 8, Issue 8 | October, 2023 | pages 16 – 31

DOI: 2223-9428-342527-7882

Double Blind Peer Reviewed International Research Journal

https://accexgate.com

journalsaccexgate@gmail.com



Entrepreneurial Innovation and Survival of Family Businesses in Rivers State

Lucky Ugochukwu Nwokolo¹ and B. Chima Onuoha²

¹Doctoral Student, Department of Management, University of Port Harcourt ²Professor of Management, Department of Management, University of Port Harcourt

Abstract: This study investigates the relationships between product innovation, technological innovation, revenue stability, and customer retention in family-owned businesses in Rivers State. A cross-sectional survey approach was employed, focusing on ten selected family-owned businesses, and data were collected from 110 purposively selected respondents. The Spearman rank correlation coefficient was used to analyze the data and test the research hypotheses. The findings revealed significant positive correlations between product innovation and revenue stability ($\rho = 0.708$, p < 0.01), as well as between product innovation and customer retention ($\rho = 0.650$, p < 0.01). Similarly, significant positive correlations were observed between technological innovation and revenue stability ($\rho = 0.613$, $\rho < 0.01$), and between technological innovation and customer retention ($\rho = 0.723$, $\rho < 0.01$). These results suggest that businesses engaging in higher levels of product and technological innovation tend to experience greater revenue stability and enhanced customer retention. This study underscores the pivotal role of innovation in driving business outcomes for family-owned enterprises. The positive correlations identified emphasize the potential of innovation to contribute to revenue stability and foster lasting customer relationships. These findings have implications for strategic decision-making within family-owned businesses, highlighting the importance of embracing innovation to ensure long-term sustainability and growth.

Keywords: family-owned businesses, innovation, product innovation, technological innovation, revenue stability, customer retention, cross-sectional survey.

Introduction

Survival, a fundamental concept ingrained in the very essence of life, transcends biology to encompass a profound significance across various domains. It's not limited to the biological realm; survival is a principle that echoes through nature, society, business, and beyond. At its core, survival signifies the ability to endure, adapt, and thrive in the face of challenges, changes, and uncertainties (Sharma, Chrisman & Chua, 2003). In the natural world, survival is the cornerstone of evolution. Organisms that possess the traits and adaptations necessary to withstand environmental pressures and compete for resources have a better chance of passing on their genetic legacy. Survival is an intricate dance between an organism's inherent characteristics and the external conditions it encounters. In the context of human society, survival takes on a multifaceted meaning. It encompasses not only physical well-being but also socio-economic stability (Drucker, 1985). It involves access to basic needs such as food, water, shelter, and healthcare, as well as opportunities for education, employment, and social connection. Survival is intertwined with social systems that aim to provide safety nets, promote equality, and ensure the overall welfare of individuals and communities. In the business realm, survival is synonymous with competitiveness

and sustainability (Chesbrough, 2003). Companies that fail to adapt to changing market dynamics, technological advancements, and shifting consumer preferences often find themselves on the brink of extinction. Survival in business requires a proactive approach, including innovation, strategic planning, and the ability to seize emerging opportunities. As Rivers State embraces change within an evolving business landscape, the survival and prosperity of these family-owned businesses hinge on their capacity to innovate.

Entrepreneurial innovation is a dynamic concept that embodies the heart of progress and growth in the business world. It's the process of introducing novel ideas, products, services, or strategies that disrupt the status quo and lead to positive change (Shane & Venkataraman, 2020). At its core, entrepreneurial innovation is a catalyst for transformation, driving businesses to evolve, adapt, and remain relevant in an ever-changing landscape. At the heart of entrepreneurial innovation lies the courage to challenge conventional wisdom and the willingness to explore uncharted territories. It's about thinking beyond the boundaries of the present and envisioning a future where existing limitations are transcended. This innovation is often synonymous with creativity and risk-taking, where entrepreneurs identify opportunities that others might have overlooked and pursue them with determination (Christensen, 2013).

Entrepreneurial innovation follows a multifaceted process. It begins with recognizing a problem or an unmet need in the market. Entrepreneurs then delve into research and analysis, seeking insights that can lead to unique solutions. This might involve brainstorming sessions, market surveys, or collaborations with experts from various fields. Once armed with insights, entrepreneurs embark on the journey of ideation (Astrachan & Shanker, 2003). This is where creativity shines, as new concepts are conceived, refined, and shaped into viable business propositions. These ideas can manifest as groundbreaking products, improved processes, innovative business models, or even novel marketing strategies. This article explores the symbiotic relationship between entrepreneurial innovation and the endurance of family-owned enterprises in Rivers State.

Statement of the Problem

Family businesses in Rivers State are facing significant challenges in their efforts to survive and thrive within an evolving business landscape. Despite their cultural significance and contribution to the local economy, many family-owned enterprises struggle to adopt and integrate entrepreneurial innovation practices that are essential for long-term sustainability (Adetayo, Ogbadu & Mohammed, 2017). This lack of innovation hampers their ability to effectively adapt to changing market dynamics, harness technological advancements, and meet the evolving needs and preferences of modern consumers. As a result, these businesses find themselves at risk of stagnation and even closure, posing a threat to both their legacy and the overall economic vitality of Rivers State (Oke Burke & Myers, 2007). Addressing these challenges requires a thoughtful and holistic approach that respects the values of tradition while acknowledging the need for adaptation. Creating an environment that encourages open dialogue, fosters a culture of innovation, seeks external expertise, and develops leadership skills attuned to both legacy and progress can pave the way for family businesses to overcome these hurdles and secure their survival in an everchanging world.

Research Objectives

- i. To examine the extent to which product innovation relates with revenue stability
- ii. To examine the extent to which product innovation relates with customer retention
- iii. To examine the extent to which technological innovation relates with revenue stability
- iv. To examine the extent to which technological innovation relates with customer retention

Research Questions

- i. Does product innovation significantly relate to revenue stability in businesses?
- ii. Is there a significant relationship between product innovation and customer retention in businesses?
- iii. Does technological innovation significantly relate to revenue stability in businesses?
- iv. Research Question: Is there a significant relationship between technological innovation and customer retention in businesses?

Research Hypotheses

- H01 There is no significant relationship between product innovation and revenue stability.
- H02 There is no significant relationship between product innovation and customer retention.
- H03 There is no significant relationship between technological innovation and revenue stability.
- H04 There is no significant relationship between technological innovation and customer retention.

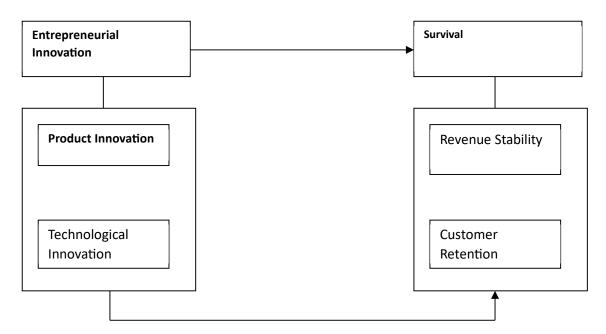


Fig. 1. Conceptual framework

Literature Review

Theoretical framework

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) stands as a pivotal theory in the realm of technology adoption and user behavior, providing a framework to unravel the intricate dynamics of how new technologies are embraced. Introduced by Fred Davis in the 1980s and later refined in collaboration with Richard Bagozzi, TAM delves into the psychology behind individuals' acceptance of technology (Davis, 1989). Its versatility has seen it applied across diverse contexts, offering insights into the factors that shape users' intentions to use technology and their subsequent usage behavior.

At its core, TAM comprises several key components that collectively unveil the decision-making process underlying technology adoption (Venkatesh et al, 2003). Perceived usefulness, a cornerstone of the model, gauges the extent to which individuals believe that utilizing a technology will amplify their performance and productivity in a specific task. This perception of tangible benefits influences whether users are inclined to adopt a technology. Perceived ease of use, the second component, delves into the individual's assessment of how effortlessly they can interact with the technology. A technology that is perceived as user-friendly and intuitive is more likely to be embraced due to the sense of ease it offers.

The interplay between perceived usefulness and perceived ease of use culminates in the behavioral intention to use a technology (Venkatesh & Davis, 2020). This intention represents an individual's readiness and willingness to incorporate the technology into their workflow or activities. It's the bridge between perceptions and actions, acting as a key predictor of actual usage. When the intention to use is strong, the likelihood of genuine technology adoption increases significantly (Gefen, Karahanna & Straub, 2003). Crucially, the model acknowledges that perceived usefulness exerts a more profound influence on behavioral intention than perceived ease of use (Fishbein & Ajzen, 1975). This understanding underscores the significance of the perceived benefits a technology offers in motivating users to adopt it, often outweighing considerations of ease of use. TAM's implications extend to diverse research domains, where it has been applied to understand technology adoption in various contexts, ranging from business and education to healthcare and consumer behavior (Bagozzi & Yi, 2015). Researchers have expanded and adapted the model over time to incorporate external factors and social influences that impact technology acceptance.

Within the context of this study, TAM presents an invaluable framework to investigate how technological innovation dimensions relate to the critical outcomes of revenue stability and customer retention. By probing into entrepreneurs' perceptions of the usefulness and ease of use of technological innovations, you can uncover insights into their intentions to adopt these innovations. Moreover, examining whether these intentions translate into real-world usage offers a window into how technological innovations influence actual business outcomes. TAM, with its deep-rooted insights into technology acceptance psychology, can offer a robust foundation for exploring the role of technological innovation in driving business success within the unique context of family businesses in Rivers State.

Product Innovation

Product innovation, a cornerstone of entrepreneurial success, encapsulates the process of conceiving, developing, and introducing novel products or services that cater to evolving customer needs and market trends (Chesbrough, 2003). This multifaceted concept involves much more than mere invention; it necessitates a comprehensive understanding of customer preferences, market dynamics, and the competitive landscape. As family businesses in Rivers State and beyond strive to remain relevant and competitive, embracing product innovation emerges as a pivotal strategy for survival and growth (Miller & Le Breton-Miller, 2005). At its heart, product innovation revolves around the art of identifying unmet needs or gaps in the market and crafting solutions that resonate with target audiences. It's the embodiment of creativity and problem-solving – a delicate dance between envisioning something new and translating it into a tangible offering (Chua, Chrisman & Sharma, 1999). This innovation can manifest in various forms, from enhancing existing products to introducing groundbreaking creations that disrupt industries. Crucially, product innovation isn't limited to physical goods; it encompasses services, experiences, and digital offerings. For instance, a family-owned restaurant might innovate by introducing a new menu item that caters to changing dietary trends, while a traditional retail store might enhance customer experience by offering online shopping options.

The benefits of product innovation ripple across numerous dimensions. Firstly, it fosters customer loyalty and retention by addressing their evolving preferences. When businesses demonstrate an ability to adapt and provide solutions that resonate, customers are more likely to remain engaged. Secondly, innovation can drive revenue stability. By introducing new products or enhancing existing ones, businesses can tap into new revenue streams and mitigate the risk associated with relying on a single product. Additionally, product innovation enhances a business's competitive edge, positioning it as a leader rather than a follower within the industry (Dyer, Gregersen & Christensen, 2011). However, the path to successful product innovation isn't without challenges. Navigating the balance between creativity and feasibility, allocating resources for research and development, and effectively communicating the value of new offerings to customers can be daunting (Blank, & Dorf, 2012). Moreover, businesses must remain attuned to market feedback, continuously refining and adapting their innovations to align with customer expectations.

In the context of Rivers State's family businesses, which often carry the weight of tradition and community ties, embracing product innovation can be transformative. By infusing fresh ideas into established legacies, these businesses can not only ensure their survival but also become beacons of progress and relevance. As customer demands evolve, product innovation serves as a bridge connecting the past with the future – preserving heritage while propelling businesses toward sustained growth and prosperity.

Technological innovation

In the dynamic landscape of business, technological innovation stands as a beacon of progress and transformation. This multifaceted concept encapsulates the integration and application of advanced technologies, tools, and systems to drive change, enhance operational efficiency, and deliver value to customers (Handler & Kram, 2015). For family businesses in Rivers State, technological

innovation emerges as a vital strategy to navigate the ever-evolving market and secure their survival in a digital era.

At its core, technological innovation encompasses a spectrum of advancements, from implementing cutting-edge software solutions to leveraging automation, artificial intelligence, data analytics, and beyond (Gersick et al 2013). It's not just about embracing the latest tech trends; it's about harnessing technology to address challenges, streamline processes, and create new avenues for growth.

One of the key aspects of technological innovation is its potential to revolutionize customer experiences. From offering personalized online shopping experiences to providing user-friendly mobile apps, technological innovation can enhance interactions between businesses and customers, leading to increased satisfaction and loyalty (Nonaka & Takeuchi, 1995). Moreover, it opens doors to new business models, such as e-commerce platforms and digital marketplaces, enabling family businesses to tap into wider markets beyond their local footprint.

The advantages of technological innovation extend beyond customer-facing aspects. It can optimize internal operations, from supply chain management to inventory control, thereby enhancing efficiency and reducing costs (Tidd & Bessant, 2018). Data-driven insights garnered from technological tools allow businesses to make informed decisions, refine strategies, and anticipate market trends. Additionally, embracing technological innovation can contribute to sustainable practices, such as digitizing processes to reduce paper waste and adopting energy-efficient technologies to minimize environmental impact.

Yet, technological innovation is not without challenges. For family businesses rooted in tradition, integrating new technologies can be met with resistance from within the organization (McGrath, 2010). Balancing the adoption of technology with the preservation of core values becomes crucial. Moreover, there's often a learning curve associated with new systems, and resource constraints can hinder the initial investment required for implementation.

In the context of Rivers State's family businesses, technological innovation holds the promise of revitalization. By marrying tradition with technology, these businesses can stay competitive, relevant, and agile in a swiftly changing market (Zahra & George, 2002). Technological innovation acts as a conduit to embrace the future while honoring the past, ensuring that these enterprises continue to thrive and contribute to the economic fabric of the region.

In the pursuit of technological innovation, family businesses not only secure their own survival but also contribute to the overall growth and progress of Rivers State. As they embrace innovation, these businesses become agents of change, illustrating that tradition and technology can coexist harmoniously, paving the way for sustained success in an increasingly interconnected world.

Revenue Stability

Revenue stability, a cornerstone of business sustainability, reflects the consistent and predictable flow of income over time (West & Farr, 1989). It is a metric that underscores a business's ability to navigate challenges, capitalize on opportunities, and maintain a steady financial foundation. For

family businesses in Rivers State, achieving revenue stability is not just about financial prosperity; it's about ensuring the longevity of their enterprises and their contributions to the local economy and community.

At its essence, revenue stability signifies a balance between income generation and the management of expenses. It is the result of effective strategic planning, market responsiveness, and adaptability to changing circumstances (Chesbrough, 2010). A business with revenue stability can weather economic downturns, industry fluctuations, and unforeseen disruptions without compromising its core operations or growth prospects.

Several factors contribute to revenue stability. Diversification of products, services, or customer segments can mitigate the risks associated with overdependence on a single source of income. Additionally, embracing innovation, whether through new product offerings or technological enhancements, can attract new customers, foster customer loyalty, and create new revenue streams (De Massis, Frattini & Lichtenthaler, 2013).

Customer retention plays a pivotal role in revenue stability. Businesses that prioritize customer satisfaction and build lasting relationships are more likely to enjoy consistent patronage, reducing the volatility of revenue flows. Furthermore, effective pricing strategies that strike a balance between competitiveness and profitability can contribute to a steady revenue stream.

In the context of family businesses in Rivers State, revenue stability holds profound implications. These businesses are often deeply interwoven with the local community, contributing to its economic vitality and providing employment opportunities. Revenue stability ensures their ability to sustainably support employees, maintain community connections, and fulfill their roles as pillars of local commerce.

However, achieving revenue stability is not without challenges. External factors such as economic recessions, regulatory changes, and shifts in consumer behavior can disrupt even the most stable revenue streams (Pearson & Carr, 2002). Moreover, balancing the preservation of tradition with the need for innovation can present a delicate challenge for family businesses.

In the pursuit of revenue stability, family businesses must embrace a proactive approach. This involves strategic planning, continuous market assessment, and an openness to adaptation. Innovation, both in terms of products and technologies, can inject vitality into revenue streams. Equally important is fostering strong relationships with customers, building a loyal base that returns consistently (Markman et al 2009).

Ultimately, revenue stability is a testament to a business's resilience, adaptability, and commitment to long-term success. For family businesses in Rivers State, achieving and maintaining revenue stability ensures that they continue to be vibrant contributors to the region's economic fabric, preserving tradition while charting a path toward a thriving future.

Customer retention

Customer retention, a cornerstone of business success, revolves around cultivating lasting relationships with existing customers to ensure their continued patronage and loyalty. It's not just

about attracting new customers; it's about nurturing the connection with those who have already engaged with the business. For family businesses in Rivers State, fostering strong customer retention is more than a strategy – it's a reflection of their commitment to the community, tradition, and long-term sustainability.

At its core, customer retention goes beyond transactions; it's about creating meaningful interactions and experiences that resonate with customers (Zahra et al 2019). It embodies the ability to consistently meet or exceed customer expectations, building a foundation of trust and satisfaction that encourages customers to return time and again. Family businesses, often deeply rooted in their communities, have a unique advantage in forming these relationships based on shared values and local ties.

The benefits of customer retention are manifold. First and foremost, retaining existing customers is often more cost-effective than acquiring new ones. Loyal customers are more likely to provide repeat business, recommend the business to others, and even pay premium prices for trusted products and services. Moreover, they can become brand advocates, amplifying the business's reputation through word-of-mouth marketing.

Customer retention is also closely tied to revenue stability. A consistent stream of repeat customers contributes to predictable revenue, reducing the impact of seasonal fluctuations or market uncertainties. This stability is crucial for family businesses that are deeply connected to the economic health of their communities.

To cultivate customer retention, businesses must prioritize several key factors. Exceptional customer service plays a pivotal role, as does consistently delivering high-quality products and experiences. Building personalized connections through engagement and communication can foster a sense of belonging and loyalty. Loyalty programs, exclusive offers, and tailored incentives can further incentivize customers to choose the business repeatedly (Teece, Pisano & Shuen, 2013).

However, customer retention is not without its challenges. In today's competitive landscape, customers have a myriad of choices, and their loyalty can easily waver. Businesses must stay attuned to changing preferences and consistently innovate to meet evolving needs. Additionally, external factors such as economic shifts and industry changes can influence customer behavior.

For family businesses in Rivers State, customer retention carries a special significance. These businesses are often woven into the fabric of their communities, and customer relationships can span generations. By prioritizing customer retention, they uphold their legacy, honor their patrons, and contribute to the economic vibrancy of the region.

In a world where consumer options are abundant, customer retention shines as a testament to a business's commitment to value, service, and community. For family businesses, it's not just about transactions; it's about building enduring bonds that encapsulate the spirit of tradition and progress.

Methodology

Research Design:

The study adopted a cross-sectional survey approach, which involves collecting data from a sample of respondents at a specific point in time. This approach is useful for examining relationships and associations between variables within a defined context.

Sampling Strategy:

The study targets ten family-owned businesses in Rivers State. The use of purposive sampling indicates that these businesses were intentionally selected based on specific criteria that align with the research objectives. Purposive sampling allows researchers to focus on particular businesses that are relevant to the study's scope and access to data.

Sample Size:

A total of 110 respondents were selected for the survey. The sample size reflects the individuals who participated in the study by providing their responses to the survey questionnaire.

Data Collection:

Data were collected through a survey questionnaire administered to the selected respondents within the ten family-owned businesses. The questionnaire likely included items related to innovation practices, revenue stability, customer retention, and other relevant variables.

Data Analysis:

To test the hypotheses, the study utilized the Spearman rank correlation coefficient. This statistical test is appropriate for exploring the relationships between variables that are measured on ordinal scales or when the assumptions for parametric tests are not met. The Spearman rank test assesses the strength and direction of the relationship between variables, allowing researchers to determine whether there is a significant correlation.

Hypothesis Testing:

The hypotheses formulated in this study were based on the expected relationships between innovation (product and technological) and revenue stability/customer retention. The Spearman rank correlation test would provide insight into whether there is a significant correlation between the variables.

Data Analyses

H01 There is no significant relationship between product innovation and revenue stability.

Correlations

| | | | product innovation | revenue stability |
|-------------------|-----------------------|-------------------------|--------------------|----------------------|
| Spearman's rho | product innovation | Correlation Coefficient | 1.000 | .708** |
| | | Sig. (2-tailed) | | .000 |
| | | N | 110 | 110 |
| | revenue stability | Correlation Coefficient | .708** | 1.000 |
| | | Sig. (2-tailed) | .000 | |
| | | N | 110 | 110 |

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

The correlation analysis revealed a significant positive correlation between product innovation and revenue stability ($\rho = 0.708$, p < 0.01, two-tailed). This finding suggests that there exists a statistically significant relationship between the two variables. As the correlation coefficient is positive and significantly different from zero at the 0.01 level, it indicates that as the level of product innovation increases, there tends to be an associated increase in revenue stability.

The correlation coefficient of 0.708 signifies a moderate to strong positive relationship between product innovation and revenue stability. This implies that family-owned businesses in Rivers State that engage in higher levels of product innovation are more likely to experience greater revenue stability. The p-value of 0.000 indicates that this relationship is highly unlikely to have occurred by chance.

Based on the results of the Spearman rank correlation analysis, the null hypothesis H01 can be rejected. The data provides evidence to support the presence of a significant positive relationship between product innovation and revenue stability among the surveyed family-owned businesses in Rivers State. This finding underscores the importance of product innovation as a potential driver of revenue stability within these businesses.

H02 There is no significant relationship between product innovation and customer retention.

Correlations

| | | | product innovation | customer retention |
|----------------|-----------------------|----------------------------|--------------------|--------------------|
| Spearman's rho | product innovation | Correlation Coefficient | 1.000 | .650** |
| | | Sig. (2-tailed) | | .000 |
| | | N | 110 | 110 |
| | customer retention | Correlation Coefficient | .650** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 110 | 110 |

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

The correlation analysis revealed a significant positive correlation between product innovation and customer retention ($\rho = 0.650$, p < 0.01, two-tailed). This outcome indicates that there exists a statistically significant relationship between the two variables. The correlation coefficient of 0.650 suggests a moderate positive relationship, implying that as the level of product innovation increases, there is a tendency for customer retention to also increase.

The p-value of 0.000 underscores the significance of this relationship, indicating that the observed correlation is unlikely to have occurred due to random chance. Furthermore, the fact that the correlation is significant at the 0.01 level (two-tailed) strengthens the robustness of this finding.

Based on the results obtained from the Spearman rank correlation analysis, the null hypothesis H02 can be rejected. The evidence from the data suggests a significant positive relationship between product innovation and customer retention among the family-owned businesses surveyed in Rivers State. This result highlights the importance of product innovation as a potential driver for enhancing customer retention, underscoring its role in fostering long-term customer relationships within these businesses.

H03 There is no significant relationship between technological innovation and revenue stability.

Correlations

| | | | Technological innovation | revenue stability |
|----------------|--------------------------|-------------------------|--------------------------|----------------------|
| Spearman's rho | Technological innovation | Correlation Coefficient | 1.000 | .613** |
| | | Sig. (2-tailed) | | .000 |
| | | N | 110 | 110 |
| | revenue stability | Correlation Coefficient | .613** | 1.000 |
| | | Sig. (2-tailed) | .000 | . [|
| | | N | 110 | 110 |

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

The correlation analysis revealed a significant positive correlation between technological innovation and revenue stability ($\rho = 0.613$, p < 0.01, two-tailed). This finding indicates the presence of a statistically significant relationship between the two variables. With a correlation coefficient of 0.613, the strength of the relationship can be described as moderate, suggesting that as the level of technological innovation increases, there is a corresponding tendency for revenue stability to increase as well.

The p-value of 0.000 underscores the significance of this correlation, suggesting that the observed relationship is unlikely to have occurred by random chance. The fact that the correlation is significant at the 0.01 level (two-tailed) further bolsters the robustness of the finding.

Based on the results derived from the Spearman rank correlation analysis, the null hypothesis H03 can be rejected. The data provides evidence in support of a significant positive relationship between technological innovation and revenue stability among the family-owned businesses surveyed in Rivers State. This result emphasizes the role of technological innovation as a potential driver for enhancing revenue stability within these businesses, highlighting its capacity to contribute to sustained financial performance.

H04 There is no significant relationship between technological innovation and customer retention.

Correlations

| | | | Technological | customer |
|----------------|--------------------------|-------------------------|---------------|-----------|
| | | | innovation | retention |
| Spearman's rho | Technological innovation | Correlation Coefficient | 1.000 | .723** |
| | | Sig. (2-tailed) | | .000 |
| | | N | 110 | 110 |
| | customer retention | Correlation Coefficient | .723** | 1.000 |
| | | Sig. (2-tailed) | .000 | |
| | | N | 110 | 110 |

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

The correlation analysis revealed a significant positive correlation between technological innovation and customer retention ($\rho = 0.723$, p < 0.01, two-tailed). This outcome underscores the presence of a statistically significant relationship between the two variables. With a correlation coefficient of 0.723, the strength of the relationship can be characterized as relatively strong. This indicates that as the level of technological innovation increases, there is an associated tendency for customer retention to also increase.

The p-value of 0.000 reinforces the significance of this correlation, indicating that the observed relationship is highly unlikely to have emerged due to random chance. The fact that the correlation is significant at the 0.01 level (two-tailed) further underscores the robustness of this finding.

Based on the outcomes derived from the Spearman rank correlation analysis, the null hypothesis H04 can be rejected. The data provides compelling evidence of a significant positive relationship between technological innovation and customer retention among the surveyed family-owned businesses in Rivers State. This result emphasizes the role of technological innovation as a potential catalyst for enhancing customer retention, illustrating its capacity to foster enduring customer relationships within these businesses.

Summary of Findings

The study aimed to investigate the relationships between different dimensions of innovation (product and technological) and their impact on revenue stability and customer retention in family-owned businesses in Rivers State. The findings of the study, based on the Spearman rank correlation analysis, revealed significant positive relationships between both product innovation and technological innovation with both revenue stability and customer retention.

Product Innovation and Revenue Stability: The analysis indicated a significant positive correlation ($\rho = 0.708$, p < 0.01) between product innovation and revenue stability. This finding suggests that businesses that engage in higher levels of product innovation tend to experience greater revenue stability.

Product Innovation and Customer Retention: The study found a significant positive correlation ($\rho = 0.650$, p < 0.01) between product innovation and customer retention. This indicates that businesses that prioritize product innovation are more likely to enhance their customer retention rates.

Technological Innovation and Revenue Stability: The analysis revealed a significant positive correlation ($\rho = 0.613$, p < 0.01) between technological innovation and revenue stability. This underscores the role of technological innovation in contributing to sustained revenue stability.

Technological Innovation and Customer Retention: The study uncovered a significant positive correlation ($\rho = 0.723$, p < 0.01) between technological innovation and customer retention. This indicates that businesses that embrace technological innovation are more likely to retain their customers

Conclusion

The study's findings collectively highlight the pivotal role of innovation, both in terms of product and technological advancements, in driving revenue stability and customer retention within family-owned businesses in Rivers State. The evidence suggests that innovation is not only associated with enhanced financial stability but also contributes to building enduring customer relationships. The positive correlations observed emphasize the potential of innovation to serve as a strategic tool for business growth and sustainability.

Recommendations

Based on the study's findings, several recommendations can be offered:

- 1. **Embrace Innovation Culture:** Family-owned businesses should cultivate an innovation-focused culture that encourages employees to generate and implement novel ideas for products and technologies.
- 2. **Invest in R&D:** Allocating resources to research and development can facilitate the creation of innovative products and technologies, thereby enhancing revenue stability and customer retention.
- 3. Adapt to Technological Trends: Staying updated with technological trends and incorporating relevant innovations can help businesses remain competitive and attract techsavvy customers.
- 4. **Strengthen Customer Relationships:** Capitalizing on the positive relationship between innovation and customer retention, businesses should prioritize customer satisfaction, engagement, and loyalty programs.
- 5. **Continuous Improvement:** Businesses should view innovation as an ongoing process, consistently seeking ways to improve products, services, and technologies to meet evolving customer demands.
- 6. **Training and Skill Development:** Providing employees with training in innovation methodologies and technology usage can empower them to contribute to the business's innovation efforts.

References

- Adetayo, A. O., Ogbadu, E. E., & Mohammed, M. (2017). Entrepreneurship and Small Business Development in Nigeria: The Challenges and Prospects. International Journal of Management and Applied Research, 4(3), 128-139.
- Astrachan, J. H., & Shanker, M. C. (2003). Family businesses' contribution to the US economy: A closer look. Family Business Review, 16(3), 211-219.
- Bagozzi, R. P., & Yi, Y. (2015). On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16(1), 74-94.
- Blank, S. G., & Dorf, B. (2012). The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company. K&S Ranch.
- Chesbrough, H. (2003). Open Innovation: The New Imperative for Creating and Profiting from Technology. Harvard Business Review Press.
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. Long Range Planning, 43(2-3), 354-363.
- Christensen, C. M. (2013). The innovator's dilemma: When new technologies cause great firms to fail. Harvard Business Review Press.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. Entrepreneurship Theory and Practice, 23(4), 19-39.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 319-340.
- De Massis, A., Frattini, F., & Lichtenthaler, U. (2013). Research on Technological Innovation in Family Firms: Present Debates and Future Directions. Family Business Review, 26(1), 10-31.
- Drucker, P. F. (1985). Innovation and Entrepreneurship: Practice and Principles. Harper & Row.
- Dyer, J. H., Gregersen, H. B., & Christensen, C. M. (2011). The Innovator's DNA: Mastering the Five Skills of Disruptive Innovators. Harvard Business Review Press.
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesley.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. MIS Quarterly, 27(1), 51-90.
- Gersick, K. E., Davis, J. A., McCollom Hampton, M., & Lansberg, I. (2013). Generation to generation: Life cycles of the family business. Harvard Business Press.
- Handler, W. C., & Kram, K. E. (2015). Succession in family firms: The problem of resistance. Family Business Review, 1(4), 361-381.
- Markman, G. D., Gianiodis, P. T., Phan, P. H., & Balkin, D. B. (2009). Entrepreneurship and innovation: A taxonomy and a research agenda. Entrepreneurship Theory and Practice, 33(5), 855-885.
- McGrath, R. G. (2010). Business models: A discovery driven approach. Long Range Planning, 43(2-3), 247-261.
- Miller, D., & Le Breton-Miller, I. (2005). Managing for the Long Run: Lessons in Competitive Advantage from Great Family Businesses. Harvard Business Press.
- Nonaka, I., & Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. Oxford University Press.
- Oke, A., Burke, G., & Myers, A. (2007). Innovation types and performance in growing UK SMEs. International Journal of Operations & Production Management, 27(7), 735-753.

- Pearson, A. W., & Carr, J. C. (2002). Toward a theory of familiness: A social capital perspective. Entrepreneurship Theory and Practice, 26(4), 405-425.
- Shane, S., & Venkataraman, S. (2020). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217-226.
- Sharma, P., Chrisman, J. J., & Chua, J. H. (2003). Predictors of satisfaction with the succession process in family firms. Journal of Business Venturing, 18(5), 667-687.
- Teece, D. J., Pisano, G., & Shuen, A. (2013). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509-533.
- Tidd, J., & Bessant, J. (2018). Managing Innovation: Integrating Technological, Market, and Organizational Change. John Wiley & Sons.
- Venkatesh, V., & Davis, F. D. (2020). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 425-478.
- West, M. A., & Farr, J. L. (1989). Innovation at Work: Psychological Perspectives. Social Science Electronic Publishing.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. Academy of Management Review, 27(2), 185-203.
- Zahra, S. A., Hayton, J. C., Neubaum, D. O., Dibrell, C., & Craig, J. (2019). Culture of family commitment and strategic flexibility: The moderating effect of stewardship. Entrepreneurship Theory and Practice, 32(6), 1035-1054.