

FRUGAL ENTREPRENEURSHIP AND BUSINESS SUCCESS OF FOOD PRODUCTS MANUFACTURING SMES IN RIVERS STATE

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ABSTRACT

This study examined frugal entrepreneurship and business success of food products manufacturing SMEs in Rivers State. Four (4) research questions and hypotheses were developed to address the objectives of the study. The study adopted the correlational research design and quantitative research approach. The population of this study comprised 23 registered food products manufacturing SMEs in Rivers State. The unit of analysis consisted of business owners, production managers, marketing managers and innovation managers of the food products manufacturing SMEs in Rivers State. A sample size of 92 respondents were drawn from the 23 food products manufacturing SMEs in Rivers State on the ratio of 4 owners/managers per enterprise. A structured questionnaire was used to elicit data from the respondents. The data collected were analyzed and the hypotheses were tested using Pearson Product Moment Correlation Coefficient (r). The correlation analysis was performed using the SPSS version 24.0. The findings revealed that affordable innovation has a significant relationship with market share growth and profitability growth of food products manufacturing SMEs in Rivers State. Cost reduction was also reported to have a significant relationship with market share growth and profitability growth of food products manufacturing SMEs in Rivers State. Based on these findings, it is concluded that frugal entrepreneurship is a significant predictor of business success of food products manufacturing SMEs in Rivers State. Therefore, it is recommended that food products manufacturing SMEs in Rivers State especially those that are struggling to compete with their larger rivals should adopt frugal entrepreneurship strategies such as affordable innovation and cost reduction as it would enhance their competitiveness and achieve business success.

Keywords: Frugal entrepreneurship, affordable innovation, cost reduction, business success, market share growth, profitability growth.

INTRODUCTION

The manufacturing of food products is one of the most competitive businesses in Nigeria. Most of the SMEs in the manufacturing sector are into food production. However, some of these SMEs are struggling to survive in this industry due to the presence and dominance of large firms in the industry. Ojinnaka (2011) noted that the presence of large and reputable firms in the food industry has made it more difficult for SMEs to thrive in the industry. Therefore, for SMEs to succeed in the food industry, they need to be really good at what they do, innovate their products continuously and focus their energy on serving niches that are overlooked by larger competitors (Sajuyigbe, 2022). In modern businesses, innovation is vital to stay ahead of competitors and succeed in business (Sanni, 2003). Large and reputable food companies such as Nestle, Unilever, Flour Mills, Cadbury, Chi Limited, Honeywell, Dangote Pasta, UAC Foods and DUFIL PRIMA Foods spend billions on innovation to stay ahead of their competitors (Taiwo et al, 2002). These companies keep launching new products into the market at expensive prices that reflect their high cost of innovation. Obviously, competing with these firms has not been easy for SMEs in the food industry given their large resources and reputation in the market. However, SMEs can still achieve business success in the midst of competition from their larger rivals by carving out a niche for

themselves, focusing their energy in serving the low-income customers in the most cost effective way, and the key to this is frugal entrepreneurship.

Frugal entrepreneurship originated from the concept of frugal innovation. It is a business approach that emphasizes the need for businesses to innovate their products and services continuously at the lowest possible costs. Laker (2022) defined frugal entrepreneurship as a business approach to create new product or service that focuses on achieving sustainable growth and inclusivity at scale. It involves the capability of a firm to generate considerably more business and social value while significantly reducing the use of scarce resources (Laker, 2022). Frugal entrepreneurship is a lean approach to innovation because it is much faster, better, cheaper and more sustainable (Hossain, 2022). A small entrepreneur needs to have that business mindset of innovation by offering new or improved products at the lowest cost. Hossain and Park (2023) stated that an entrepreneur with a frugal mindset learns to build and scale-up their ideas with the target values and create amazing products at reduced costs. Zeschky (2014) noted that some entrepreneurs implement frugal innovation due to limited resources. Besides the cost benefit, a frugal entrepreneur develops solutions from their cleverness and continuously innovates their products to stay ahead of their larger rivals in serving the low-income market segment of a nation (Alzaim, 2022).

Frugal entrepreneurship is the key to business success because it targets the low-income customers who are often neglected by large firms that produce luxury and expensive products (Kumar & Puranam, 2012). Pisoni (2018) argued that frugal entrepreneurs carve out a niche for themselves in the low-income market segment by developing quality and affordable products that perform similar functions as those offered by large rivals. In developing country like Nigeria where there is large population of low-income earners, entrepreneurs with frugal mindsets are likely to make a giant stride and achieve business success. This is based on the fact that frugal entrepreneurs study the buying behaviour of low-income customers which is often overlooked by large firms that produce luxury products at a high cost, and develop new products at lowest costs which are suitable and affordable by this market segment. By creating new products at the lowest possible costs, frugal entrepreneurs are likely to sell their products at cheaper prices, capture a large portion of the market and achieve business success. It is against this backdrop that this study examines frugal entrepreneurship and business success of food products manufacturing SMEs in Rivers State.

Statement of the Problem

Achieving business success has become a challenging task for SMEs in the food manufacturing industry in Rivers State. Many food SMEs in Rivers State have ceased from operations while some of the firms still operating are struggling to capture significant portion of the market for themselves due to the competition from their large rivals. Large and reputable food companies such as Nestle, Unilever, Flour Mills, Cadbury, Chi Limited, Honeywell, Dangote Pasta, UAC Foods and DUFIL PRIMA Foods have their products circulated in the marketplace, and these companies keep launching new products into the market to sustain their competitive position. The big question now is how can SMEs in the food industry achieve business success in the midst of competition from their larger rivals? This paper proposes frugal entrepreneurship as the solution to business success. Although some scholars (e.g. Kumar & Puranam, 2012; Pisoni, 2018; Hossain, 2022; Alzaim, 2022) have described frugal entrepreneurship as the key to business success in developing countries with large population of low-income customers. However, their arguments have been purely theoretical while empirical evidence to support their position is still lacking within the Nigerian context as empirical studies that examined the relationship between frugal

entrepreneurship and business success are too insufficient to reckon with. This deficiency in literature is the motivation behind this study.

Conceptual Framework

The conceptual framework of frugal entrepreneurship and business success is presented in figure 1 below:



Fig 1: Conceptual framework of frugal entrepreneurship and business success

Aim and Objectives of the Study

The aim of this study is to examine the relationship between frugal entrepreneurship and business success of food products manufacturing SMEs in Rivers State. The specific objectives of the study are to:

1. determine the relationship between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State;
2. ascertain the relationship between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State;
3. find out the relationship between cost reduction and market share growth of food products manufacturing SMEs in Rivers State;
4. explore the relationship between cost reduction and profitability growth of food products manufacturing SMEs in Rivers State.

Research Questions

The following research questions were developed in this study:

1. What relationship exists between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State?
2. To what extent does affordable innovation relate to profitability growth of food products manufacturing SMEs in Rivers State?
3. How does cost reduction relate to market share growth of food products manufacturing SMEs in Rivers State?
4. To what extent cost reduction relate to profitability growth of food products manufacturing SMEs in Rivers State?

Research Hypotheses

The following hypotheses were postulated to provide direction for this study:

H₀₁: There is no significant relationship between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State.

H₀₂: There is no significant relationship between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State.

H03: There is no significant relationship between cost reduction and market share growth of food products manufacturing SMEs in Rivers State.

H04: There is no significant relationship between cost reduction and profitability growth of food products manufacturing SMEs in Rivers State.

Review of Related Literature

Concept of Frugal Entrepreneurship

Frugal entrepreneurship is a concept that emerged from two different concepts namely; frugal and entrepreneurship. According to Hossain (2022), frugal entrepreneurship is a combination of frugal and entrepreneurship concepts. While entrepreneurship is considered as a business that helps to improve the living standard of people and foster economic development, frugal entrepreneurship is embarked upon to raise the living standard of the people in developing countries where conventional products are too expensive for many people (Hossain, 2022). Frugal entrepreneurship is a form of entrepreneurship that is based on bringing an affordable innovation to market with limited resources (Michealis et al, 2020). Alzaim (2022) defined frugal entrepreneurship as the process of developing affordable products efficiently in resource-constrained environments, responding to the specific needs of underserved customers in developing countries and marginalized communities.

Frugal entrepreneurship provides a market opportunity for entrepreneurs to exploit within the new frugal context (Shivdas et al, 2021). It enables an entrepreneur to pursue an unexploited opportunity under resource constraints (Ma et al, 2015). Dabic et al (2022) stated that frugal entrepreneurship is a means for solving the pressing problems encountered by low-income customers through the provision of cheaper alternatives to unaffordable conventional products in a developing and highly constrained economy. Hossain and Sarkar (2021) argued that frugal entrepreneurship can turn problems into market opportunities by offering new products that satisfy the needs of the underserved and overlooked low-income customers. Frugal entrepreneurs identify and explore the unexploited paths to create value for the underserved population (Mair et al, 2012). They mobilize human and financial resources and integrate them into their innovation process to arrive at new products that are affordable to low income customers (Mair et al, 2012).

Dimensions of Frugal Entrepreneurship

There are several dimensions used to describe frugal entrepreneurship practices. However, the dimensions of frugal entrepreneurship considered in this study are affordable innovation and cost reduction.

Affordable Innovation

When talking about innovation within the context of frugality, what quickly comes to the mind is affordability. As Hossain (2021) stated, no innovation can be classified as frugal unless such innovation is affordable. Affordable innovation differs from the expensive concept of innovation in the sense that it emphasized the need for new product to be affordable. At the global and national levels, there have been a fundamental shift from expensive and high cost innovation to affordable innovation (Sheth, 2021). However, frugal entrepreneurs are the key drivers of affordable innovation as they strive to serve the low-income market segment that has been neglected by large firms (Dima et al, 2022). Affordable innovation requires entrepreneurs to do more with less (Radjou & Prabhu, 2015). Such innovation is embarked upon by firm to meet the needs of consumers with low ability to pay for expensive products (Radjou & Prabhu, 2015).

Affordable innovation is considered as a means for addressing the challenges of low-income customers and providing economic value (Pisoni et al, 2018). A typical example of affordable innovation is Tata Nano vehicle. Tata Nano is an Indian car model which was developed specifically for the low-income population. Before the arrival of Tata Nano, it was impossible for

the low-income earners to afford a car, and it was due to lack of affordable vehicle that made many families in India to ride unsafe motorcycles to their destination. To address this problem, Tata Nano was built and launched into the market, and the low-income Indians are now able to buy a car for just \$2,000 (Nair et al, 2015). Affordable innovation can help a complex and resource-constrained country like Nigeria to address her food crisis by making sure that food products are available, affordable and accessible to every citizen in the country on a daily basis. According to Mazumdar-Shaw (2018), affordability is the key to accessibility. Given the food crisis in Nigeria, cheaper and low-priced food products can work wonders. According to Ajibade et al (2019), cheaper food products can bring hope to the Nigerian people and actualize the 2030 Sustainability Development Goal (SDG) No.2 which contains the global commitment to end hunger, achieve food security and promote sustainable agriculture by making food available, affordable and accessible.

Cost Reduction

For frugal entrepreneurs to deliver affordable innovation, they must reduce their cost of innovation. According to Corsini et al (2020), cost reduction is a crucial aspect of frugal entrepreneurship because it leads to the actualization of cheaper and affordable products. Without reducing costs it will be impossible to implement the frugal element of entrepreneurship by delivering cheaper and affordable products (Agarwal et al, 2016). By reducing cost, frugal entrepreneurs develop cheaper products to serve the customers who are often placed at the bottom of the pyramid, neglected, forgotten and underserved in the mainstream markets (Alzaim, 2022). Nylund et al (2021) stated that the cost reduction element enables frugal entrepreneurs to create an all-inclusive market where the low-income customers can be part of. This helps to reduce inequality and poverty as equal opportunities are provided for all (Gibbert et al, 2014). Hossain et al (2022) posited that cost reduction is key to the success of frugal entrepreneurship because it makes products more affordable and increase accessibility. Through cost reduction, frugal entrepreneurs develop cheaper and affordable products that address the unmet needs and create value for the underserved community (Gibbert et al, 2014). Weyrauch and Herstatt (2017) argued that frugal entrepreneurs can reduce substantial costs by focusing on the core features of a product and optimized performance. According to them, no entrepreneur can be considered as frugal entrepreneur unless he or she is able to deliver affordable product at a reduced cost. Therefore, cost control should be a foundational aspect of frugal entrepreneurs' culture and should not be a decision made based on case-to-case analysis rather a regular review of their budgets, cost-benefit analysis and a strong commitment to eliminate unnecessary expenses (Hossain et al, 2022).

Concept of Business Success

A successful business is one that earns a good return on investment for its shareholders who risked their capital in the venture (van Praag, 2003). Business success can be described from the financial and non-financial point of view (Muslim et al, 2011). According to Muslim et al (2011), financial success include return on investment, return on assets, profitability and revenue while non-financial success include market share, sales, productivity, customer satisfaction, employee satisfaction, employee commitment and customer patronage. Hani (2021) stated that a successful business has a strong culture with highly committed employees who stand behind the mission of the company. Dalglish (2004) argued that a business can only be successful when it has the right quality of staff and remain focus on achieving its set objectives. Success is achieved by gradually realizing the goals of the business (Rasmus & Laguna, 2018). Ayala and Manzano (2014) noted that successful entrepreneurs establish their business goals and take timely decisions to achieve those goals in a competitive and uncertain environment. For instance, when an entrepreneur carved out a niche for himself, set its goals for the target market segment and realized those

goals, such entrepreneurs can be said to have achieved business success (Ayala & Manzano, 2014). Hani (2021) opined that a business is said to be successful if it is able to satisfy customers and employees in the most profitable way and remain competitive in the industry.

Measures of Business Success

Business success can be measured using various indicators. In this study, business success is measured using market share growth and profitability growth.

Market Share Growth

Market share refers to the portion of a market served by a company (Fazlzadeh & Sabbaghi, 2010). It is the total sales made by a company in relation to the overall industry's sales (Fazlzadeh & Sabbaghi, 2010). For example, in the sugar industry, if the total purchasing activity of customers is 100 packs of sugar in a year and a company that produces sugar sells 40 packs of its sugar brand, it means that the company holds a 40% market share. If the same company sells 50 packs of sugar in the following year, it means that the company has obtained a 60% market share the following which is an indication of 10% market share growth. Therefore, market share growth is the increase in the market served by a company for a given period of time (Bhattacharya et al, 2021). When calculating the market share of a firm, the entrepreneur needs to consider the total sales of his company and the total sales of the industry for specific period of time (Kouser et al, 2012). The more sales that the company makes, the higher its market share (Hani, 2021). Market share growth shows the amount of influence which a company has in its industry. Generally, companies seek to increase their market share because it enables them to achieve greater economic of scale and increase profitability (Cowling, 2004).

Profitability Growth

Profitability growth is one of the most common indices used to measure business success (Fitzsimmons et al, 2005; Muslim et al, 2011; Razmus and Laguna, 2018). It is the financial metric which companies generally use to determine their financial success (Fitzsimmons et al, 2005). Profit measures how much money a company earns from its normal operations and after subtracting its expenses while profitability growth shows how much the financial revenue has increased over time (Cowling, 2004). Profit is the reward that comes out from hard work put into a business venture (Markman & Gartner, 2002). Such profit also allow the company to accomplish its goals and aspirations (Markman & Gartner, 2002). Profitability growth comes from being successful in business (Kouser et al, 2012). The more sales that the company makes, the higher its profit (Kouser et al, 2012). Profitability growth helps a company to attract more investors and increase its competitiveness in the industry (Muslim et al, 2011). Razmus and Laguna (2018) noted that a profitable company will be able to generate more wealth and value for its shareholders and remain competitive in its industry for a long time.

Theoretical Review

This study is anchored on the dynamic capability theory which was developed by Teece and Pisano in 1994. According to Teece et al (1997), dynamic capabilities are the abilities of firms to combine, develop and reconfigure their internal and external expertise to respond quickly to the changing environment. Dixon et al in Shivdas et al (2021) stated that dynamic capabilities enable a firm to exploit market opportunities and gain sustainable competitive advantage in an emerging market which is complex with high volatility. The theory is more concerned with the development of strategies to adapt to radical discontinuous change while at the same time maintaining minimum capability standards to ensure the firm's survival (Monteiro et al, 2017). The theory argues that the success of a firm depends on the resources and capabilities of the firm to adjust itself to the changes in the market (Rua et al, 2018). The dynamic capability theory is useful in analyzing the relationship between frugal entrepreneurship and business success. The theory

explains that business success depends on the resources and capabilities of frugal entrepreneurs to adjust themselves and create affordable innovation for the low-income market segment at a reduced cost. The theory believes that entrepreneurs can be successful in business if they demonstrate the capabilities to reduce their cost and adjust from their expensive innovation to affordable innovation. The dynamic capability theory requires frugal entrepreneurs to rely on their resources and capabilities to gain sustainable competitive advantage over their larger rivals in the low-income market segment.

Empirical Review

Previous studies have been conducted on frugal entrepreneurship and business success. For instance, Michaelis et al (2018) examined frugal entrepreneur from a self-regulatory perspective of resourceful entrepreneurial behaviour. Their study employed the survey research design where questionnaire was used to collect data from 178 entrepreneurs whose businesses have been in existence for the 5 years and above while the confirmatory factor analysis and OLS hierarchical regression were used for data analysis and hypotheses testing. The findings revealed that frugality is unique from trait self-control in the sense that frugality is positively related to effectuation behaviours such as affordable loss and flexibility dimensions, and bricolage behaviour. The study also revealed that self-control is positively related to causation behaviours. The study concluded that trait of frugality is positively related to resourcefulness-related behaviours often displayed by entrepreneurs.

Hossain and Park (2023) explored frugal entrepreneurship as a means for solving pressing social challenges at the grassroots level. Their study adopted the qualitative research approach and used an interview schedule to collect data from founders (entrepreneurs) and top managers of 13 companies in South Asia while the thematic analysis was used to analyze the data obtained from the interview section. The findings showed that frugal entrepreneurs solve numerous social problems with both business and inclusive growth. The study also revealed that frugal entrepreneurs turn institutional voids as an opportunity to create venture and they face partnership challenges. The study equally revealed that frugal entrepreneurs lack adequate funding which prompt them to engage in risky borrowing.

Dima et al (2022) explored the relationship between frugal innovation and business sustainability. The researchers conducted a bibliometric analysis to determine how frugal innovation relate to business sustainability. The researchers used the Clarivate's Web of Science (WoS) database for gathering documents for their bibliometric analysis. The data generated covered the period of 1976-2021. The data generated were analyzed using descriptive and performance software tool such as the VOS viewer software. The findings revealed that frugal innovation has a positive relationship with economic sustainability of firms. The study revealed that frugal innovation cuts costs, ensure the accessibility and affordability of products by low-income earners, empower the local people, improve their life quality and develop the economies of emerging markets.

Hossain (2022) explored frugal entrepreneurship with a particular focus on the role of resource mobilization in resource-constrained environments. The study employed the qualitative research approach and case study design where in-depth interview were used to collect data from frugal entrepreneurs in Gujarat, Karnataka and Tamil Nadu in India and supported with other sources of data collection such as observations and document analysis. The data collected from multiple sources were triangulated to ensure the validity of the study while the Atlas ti software was used for the qualitative data analysis. The findings revealed that frugal entrepreneurs in India mobilize human, financial and social resources to implement frugal business venture. The study also revealed that frugal entrepreneurs unlike other entrepreneurs, possessed manual work skills and

help each other with financial and technical know-how to understand their context and culture which they integrate into their innovation process when developing frugal solutions.

Shahid et al (2023) explored frugal innovation as a source of sustainable entrepreneurship to tackle social and environmental challenges. Their study adopted the multiple cases study design and the qualitative research approach where data were collected from co-founders (frugal entrepreneurs), senior managers, partners and experts from selected organizations in Pakistan using unstructured interview, field observation and archival documents. The qualitative data were analyzed using NVivo software program and the results revealed that entrepreneurship that is based on frugal innovation significantly produces social outcomes such as female empowerment, improved quality of life and access to affordable healthcare for low-income customers as well as environmental outcomes such as sustainable products and production techniques. The study also revealed that sustainable entrepreneurship creates new markets in developing countries and promotes inclusive growth.

Hossain and Sarkar (2021) examined frugal entrepreneurship and its profit on inclusive growth. Their study employed the multiple case research design where interviews field notes and archival reports were used to obtain data from poor customers in developing countries in South Asia region. The qualitative data were analyzed using coding and Atlas.ti software program and the findings showed that unlike conventional firms, frugal entrepreneurship profits from business growth and inclusive growth. The study also revealed that frugal entrepreneurship has proven to be successful in providing affordable products for low-income customers and show a way of profiting with inclusive growth.

Mashhour (2022) carried out a study to determine the role of frugal innovation and social entrepreneurship in supporting socio-economic life in emerging markets. The study adopted the exploratory and multiple case research design as well as the qualitative research approach. Data were collected from entrepreneurs of small businesses such as Nano, micro and small enterprises in Saudi Arabia and India using as a semi-structured interview. The data collected were analyzed using thematic analysis and the results revealed that frugal innovation provides low-cost, accessible and handy solutions for underserved population; while social entrepreneurship is directed towards achieving socio-economic outcomes. The study concluded that frugal innovators and social entrepreneurs are directed towards the underserved and bottom of the pyramid population.

Gap in Reviewed Literature

The literature review shows that a good number of studies have been conducted on frugal entrepreneurship but none of these studies relate frugal entrepreneurship to business success of food products manufacturing SMEs in Rivers State, Nigeria. Even the dimensions of frugal entrepreneurship such as affordable innovation and cost reduction were not related to the measures of business success such as market share growth and profitability growth of food products manufacturing firms in Rivers State. There is also gap in the methodology adopted by previous researchers in exploring frugal entrepreneurship in SMEs. Most of the previous studies adopted the qualitative research approach and case study research design whether interview were used as the main instrument for data collection while studies that employed the correlational research design and the quantitative research approach where questionnaire was used as the main instrument for data collection were lacking. This has created a vacuum in literature which the present study intended to fill and contribute to the existing literature from the Nigerian perspective.

METHODOLOGY

The correlational research design and quantitative research approach were adopted in this study. The population of this study comprised 23 registered food products manufacturing SMEs in Rivers State (Port Harcourt Chamber of Commerce, Industry and Tourism, 2023). The unit of analysis consisted of business owners, production managers, marketing managers and innovation managers of the food products manufacturing SMEs in Rivers State. A sample size of 92 respondents were drawn from the 23 food products manufacturing SMEs on the basis of 4 owners/managers per enterprise. The instrument used in collecting data from the respondents was a questionnaire which was structured on a four (4) rating scale such as Strongly Agree, Agree, Disagree and Strongly Disagree. The validity of the instrument was determined through face and content analysis while its reliability was confirmed using Cronbach Alpha method. A total of 92 copies of questionnaire was administered to the respondents across the food products manufacturing SMEs in Rivers State, and 81 copies were collected. The data collected were analyzed and the hypotheses were tested using Pearson Product Moment Correlation Coefficient (r). The SPSS 24.0 version was used to perform the correlation analysis and the results are presented and discussed in relation to previous studies.

RESULTS AND DISCUSSION

The results of the correlation analysis carried out on frugal entrepreneurship (affordable innovation and cost reduction) and business success (market share growth and profitability growth) were presented in this section. The SPSS software program version 24.0 was used to perform the correlation analysis on the study variables. The results are presented in the tables below:

Table 1: Relationship between affordable innovation and market share growth of food products manufacturing SMEs

			Affordable Innovation	Market Share Growth
Pearson (r)	Affordable Innovation	Correlation Coefficient	1.000	.688**
		Sig. (2 tailed)	.	.001
		N	81	81
	Market Share Growth	Correlation Coefficient	.688**	1.000
		Sig. (2 tailed)	.001	.
		N	81	81

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source SPSS-Generated Output

Table 1 shows the result of the correlation analysis carried out between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State. The result indicates that affordable innovation is strongly and positively correlated to market share growth of food products manufacturing SMEs ($r = .688^{**}$) and this correlation is significant at 0.01 level as signified by the symbol **. Based on this result, the null hypothesis (H_{01}) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is significant relationship between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State.

Table 2: Relationship between affordable innovation and profitability growth of food products manufacturing SMEs

			Affordable Innovation	Profitability Growth
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Pearson (r)	Affordable Innovation	Correlation Coefficient	1.000	.772**
		Sig. (2 tailed)	.	.001
		N	81	81
	Profitability Growth	Correlation Coefficient	.772**	1.000
		Sig. (2 tailed)	.001	.
		N	81	81

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source SPSS-Generated Output

Table 2 presents the result of the correlation analysis carried out between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State. The result shows that affordable innovation has a strong positive correlation with profitability growth of food products manufacturing SMEs ($r = .772^{**}$) and the symbol ** indicates that this correlation is significant at 0.01 level. Based on this result, the null hypothesis (H_{02}) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is significant relationship between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State.

Table 3: Relationship between cost reduction and market share growth of food products manufacturing SMEs

			Cost Reduction	Market Share Growth
Pearson (r)	Cost Reduction	Correlation Coefficient	1.000	.629**
		Sig. (2 tailed)	.	.001
		N	81	81
	Market Share Growth	Correlation Coefficient	.629**	1.000
		Sig. (2 tailed)	.001	.
		N	81	81

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source SPSS-Generated Output

Table 3 depict the result of the correlation analysis carried out between cost reduction and market share growth of food products manufacturing SMEs in Rivers State. The result indicates a strong positive correlation between cost reduction and market share growth of food products manufacturing SMEs ($r = .629^{**}$) and the symbol ** signifies that this correlation is significant at 0.01 level. Based on this result, we the reject the null hypothesis (H_{03}) and accept the alternate hypothesis which states that there is significant relationship between cost reduction and market share growth of food products manufacturing SMEs in Rivers State.

Table 4: Relationship between cost reduction and profitability growth of food products manufacturing SMEs

			Cost Reduction	Profitability Growth
Pearson (r)	Cost Reduction	Correlation Coefficient	1.000	.866**
		Sig. (2 tailed)	.	.001
		N	81	81
	Profitability Growth	Correlation Coefficient	.866**	1.000
		Sig. (2 tailed)	.001	.
		N	81	81

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source SPSS-Generated Output

Table 4 presents the result of the correlation analysis carried out between cost reduction and profitability growth of food products manufacturing SMEs in Rivers State. The result shows a very strong positive correlation between cost reduction and profitability growth of food products manufacturing SMEs ($r = .866^{**}$) and this correlation is significant at 0.01 level as indicated by the symbol **. Consequently, the null hypothesis (H_{04}) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is significant relationship between cost reduction and profitability growth of food products manufacturing SMEs in Rivers State.

Discussion of Findings

It was reported in this study that significant relationship exists between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State. This finding emerged from the result of the correlation analysis carried out on two variables. The result revealed that affordable innovation is strongly and positively correlated to market share growth of food products manufacturing SMEs ($r = .688^{**}$) and this correlation is significant at 0.01 level (see table 1). Based on this result, the null hypothesis (H_{01}) was rejected and the alternate hypothesis was accepted. This means that we then accepted that there is significant relationship between affordable innovation and market share growth of food products manufacturing SMEs in Rivers State. This finding is supported by Sheth (2021) who reported that affordable new products attract more customers and increase the market share of a firm. Laker (2022) also agreed with this finding when they stated that innovations that are affordable significantly increase the customer base of a firm.

This study also found a significant relationship between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State. This finding emanated from the result of the correlation analysis carried out on the two variables. The result revealed that affordable innovation has a strong positive correlation with profitability growth of food products manufacturing SMEs ($r = .772^{**}$) and this correlation is significant at 0.01 level (see table 2). Based on this result, the null hypothesis (H_{02}) was rejected and the alternate hypothesis was accepted. This means that we then accepted that there is significant relationship between affordable innovation and profitability growth of food products manufacturing SMEs in Rivers State. This finding is supported by Hossain et al (2022) who noted that affordable innovation attracts more sales and increase the profit margin of a firm. Mazumdar-Shaw (2018) also supported this finding when they stated that companies that produce new products that are affordable are likely to increase their profitability.

This study discovered a significant relationship between cost reduction and market share growth of food products manufacturing SMEs in Rivers State. This finding was deduced from the result of the correlation analysis carried out on the two variables. The result showed a strong positive correlation between cost reduction and market share growth of food products manufacturing SMEs ($r = .629^{**}$) and this correlation is significant at 0.01 level (see table 3). Based on this result, we the rejected the null hypothesis (H_{03}) and accepted the alternate hypothesis which states that there is significant relationship between cost reduction and market share growth of food products manufacturing SMEs in Rivers State. This finding is in line with the research conducted by Dima et al (2022) which reported that cost reduction significantly increase the market share of a company. Shahid et al (2023) also agreed with this finding when they revealed that cost reduction enables

companies to sell their products at cheaper prices which attract more customers and increase the market share of a firm.

Finally, it was reported that cost reduction has significant relationship with profitability growth of food products manufacturing SMEs in Rivers State. This finding emerged from the result of the correlation analysis carried out on the two variables. The result showed a very strong positive correlation between cost reduction and profitability growth of food products manufacturing SMEs ($r = .866^{**}$) and this correlation is significant at 0.01 level (see table 4). Consequently, the null hypothesis (H_{04}) was rejected and the alternate hypothesis was accepted. This means that we then accepted that there is significant relationship between cost reduction and profitability growth of food products manufacturing SMEs in Rivers State. This finding is supported by Shivdas et al (2021) who noted that cost reduction significantly increase the profitability of a firm in a competitive market. Laker (2022) also agreed with this finding when they reported that cost reduction does not only increase the competitiveness of a firm but also increase its profit margin.

CONCLUSION

The low-income customers are often neglected, underserved and constitute the bottom-of-the pyramid. Hence if food products manufacturing SMEs should have any chance of achieving business success in the midst of competition from their larger rivals, they need to carve out a niche for themselves by focusing on the underserved population. This can be done by adopt frugal entrepreneurship where affordable innovation and cost reduction are implemented. The results of this study has proven that affordable innovation is a significant predictor of market share growth and profitability growth of food products manufacturing SMEs. Cost reduction was also found to be a significant predictor of market share growth and profitability growth of food products manufacturing SMEs. Since affordable innovation and cost reduction are significant predictors of market share growth and profitability growth, it is therefore concluded that frugal entrepreneurship is significantly related to business success of food products manufacturing SMEs in Rivers State.

RECOMMENDATIONS

The following recommendations are provided for the study:

1. That, food products manufacturing SMEs in Rivers State especially those that are finding it difficult to compete with their larger rivals should adopt frugal entrepreneurship strategies as it would enhance their competitiveness and achieve business success.
2. That, food products manufacturing SMEs in Rivers State especially those with low market share should embark on affordable innovation as this would attract more low-income customers and increase their market share.
3. That, food products manufacturing SMEs in Rivers State especially those with low profit margin should reduce their cost of innovation and make their products more affordable to low-income customers as this would not only increase their sales and market share but also boost their profitability.
4. That, food products manufacturing SMEs in Rivers State should closely monitor the activities and strategies of their larger rivals so as to identify those areas that are neglected or underserved by them and create frugal products that will meet the needs of the underserved population.
5. Finally, it is recommended that food products manufacturing SMEs in Rivers State should interact with the low-income customers regularly to understand what they actually need and produce affordable products that will satisfy these needs.

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