

MARKETING INFORMATION SYSTEM AND MARKETING PERFORMANCE OF FOOD AND BEVERAGE FIRMS IN PORT HARCOURT

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ABSTRACT

Our study centered on marketing information system and marketing performance of food and beverages firms in Port Harcourt. Marketing information system drives every organization in the creation, sharing, storage and implementation of information and expertise within an organization to support and improve its business performance, and remains life wire of every organization. The study adopted survey research design with questionnaire as major instrument in data collection. The questionnaire was validated by marketing experts with a reliability index of 0.89. A census study of the entire twenty foods and beverage firms operating in Port Harcourt the Rivers State capital, Nigeria was carried out. In course of the study, it was found and held among others that significant relationship exist between customer data base and sales volume of food and beverages firms in Port Harcourt. Again, that significant relationship exists between marketing analytics and market share of food and beverages firms in Port Harcourt. The study equally revealed and held that significant relationship exist between marketing research and profitability of food and beverages firms in Port Harcourt. Consequently, the following recommendations among others were put forward: that food and beverage firms should make use of the internet in gathering customer data online improving their marketing information systems because new company designs existing obstacles and chances exist as firms look forward to take on e-business strategies in the search for increase in sales and competitive advantage. Firms should regularly carry out market research to be abreast with trends, meeting needs and wants of their customers, knowing that management may not have the ability to alter consumer demands and wants, new rival campaigns, altering market trends and so on, but it can establish and handle a better details system that can boost its competitive edge in the target audience carrying out well organized market research.

Key words: Marketing, Information, System, internet, marketing performance, food and beverages, firms

INTRODUCTION

Background of the Study

In the words of Marion Herper (2000) "to manage a business well is to manage its future and to manage the future is to manage information". Marketing managers need information on the effectiveness of their marketing tools. In today's rapidly changing environments, managers at all levels need much better up- to -date information to make timely decision. Timely and accurate information about customers, competitions, dealers and other forces in the market place are needed to carrying out marketing analysis, evaluation and distribution. A marketing information system is actually a tool that helps companies gather and analyze information about their customers, competitors, and market trends. It helps companies make informed decisions about their marketing strategies and products. It's like a detective to marketing managers helping businesses solve the mystery of what their customers want and how to reach them.

Marketing information system deals with the creation, sharing, storage and implementation of information and expertise within an organization to support and improve its business performance (Abusweilem & Abualoush, 2019). For organizations to be more successful and survive in a

competitive market, they need to consider adaptive and intelligent strategies, including marketing (Elfar, Elsaid & Elsaid, 2017). Knowledge management practices are becoming increasingly imperative for improving decision-making capabilities, learning organizations, and stimulating cultural change and innovation (Novak, 2017). Marketing information system continues to be very significant in promoting the performance of organizations (Novak, Hoffman & Yung, 2020).

Interestingly, almost every company has a marketing information system and businesses can generally use marketing information system in place to control their pricing strategy, develop more effective marketing campaigns, and devise relevant offers at the ideal location and appropriate time, since marketing information systems enable companies to significantly improve their offerings and the quality of their decisions. To have improved decision-making, a marketing information system provides relevant and timely information about customers, competitors, and the market, enabling companies to make better-informed decisions about marketing strategies, product development, and resource allocation. In addition, marketing information system enables companies to gather and analyze customer data, including preferences, behaviors, and feedback. Thus, helps companies better understand their customers and develop more effective marketing campaigns and product offerings, enhancing customer insights. More so, marketing information system in place can in helping companies identify new market opportunities, optimize pricing strategies, and reduce costs as well as increase revenue and profitability by improving their marketing and sales efforts. This is not losing sight of its competitive advantage in that marketing information system (MIS) allows companies stay updated with market trends and competitor activities. Marketing information systems refer to all data from facts, opinions, viewpoints, rules, and regulations required to make essential marketing choices. The various sources include customers, rivals, the firm's sales force and other employees, government sources, specialist agencies, etc. The information so provided can be used to develop more effective marketing strategies and gain a competitive advantage in the market. The importance of MIS therefore cannot be overemphasized, the importance comes from the helpful insights it provides. Marketing information systems are a system that improves the decisions of managers in companies (Sääksjärvi, & Talvinen, 2018). It significantly enhances the performance of the organization and is considered as a competitive advantage and by doing this the duty of computer and additional systems as a subsidiary system for processing period and the expert system is significantly increased i.e., if the capacity of customers of subsidiary systems of computer is enhanced, the supervisory activities of the company is boosted. Nowadays, among the major requirements of profiting marketing details system is developing data source for signing up details. The responsibility and function of informative advertising systems is gathering details and procedures of producing components via close relationships with consumers (Rad, Massafi & Tak, 2019). Quite certainly, marketing managers need information on the effectiveness of their marketing tools. In today's rapidly changing environments, managers need much better up- to -date information to make timely decision. Again, in carrying out Marketing Analysis, Evaluation and Distribution, Marketing Managers need timely and accurate information about customers, competitions, dealers and other forces in the market place. Marion Herper says "to manage a business well is to manage its future and to manage the future is to manage information" (Kolter & Armstrong 2004). Marketing Information System (MIS) begins and ends with the marketing managers to assess their information needs and also develop the needed information from internal company records, marketing intelligence activities and marketing research process. In addition, the marketing information system distributes information to managers in the right form and at the right time to help them in marketing planning, implementation and control. By accessing information needs, a good marketing information system balances the information managers would like to have against what they really need and what is feasible to offer. Attention on marketing performance noted that most small and medium scale firms over the years have not survived in the business world. This has become critical in recognizing essential factors that aid or impede the achievement of results. Organizational performance in simple terms, checks the

precision with which an organization has attained its pre-set strategic goals (Byukusenge, 2017). This typically depends on the quality of people and how well they can use the resources at their disposal to achieve a given set of organizational goals. Specifically, the performance of the SMEs in Malaysian has not been much effective. Some of the SMEs have liquidated their operations due to low sales. It was noted that around 65% of the SMEs cease operations before three years in operations (Byukusenge, 2017). Marketing performance remains a measure of how services are offered, the quality of products, return on investment, and the level of customer satisfaction with an organization’s products (Mtswenem, 2020). Thus, our study sought to investigate sought to examine whether marketing information systems can influence performance, drawing or analysis from food and beverages firms in Port Harcourt.

Statement of the Problem

Marketing principle is sometimes called advertising positioning or consumer alignment. The idea mentioned that in order for a company to survive over time and make revenue, it should identify the authentic wants and needs of particularly defined target markets and afterwards generate products that please consumer's needs. (Agarwal, Erramilli & Dev, 2019) argued that marketing concept holds that accomplishing business objectives relies on identifying the needs and wants of target markets and providing of desired satisfactions better and successfully than rivals do. Good marketing information system gives correct data on controllable and non-controllable elements and customers that improves the effectiveness of choices made by marketing managers (Alejandro, 2018). Absence of relevant marketing information system can cause customers action to certain marketing programs difficult to forecast properly. However, despite the importance of MIS in organizations, as tool that helps companies gather and analyze information about their customers, competitors, and market trends, helping companies make informed decisions about their marketing strategies and products. Most food and beverage firms seem not to have given deserved attention to adoption of marketing information system, and MIS done haphazardly, which may have resulted to the problem of declining level of sales, poor market share, not making profit and collapse of some food and beverage firms. The situation is quite worrisome calling for research and credence to this study as to empirically investigate marketing information system and marketing performance, drawing or analysis from food and beverages firms in Port Harcourt.

Conceptual Framework

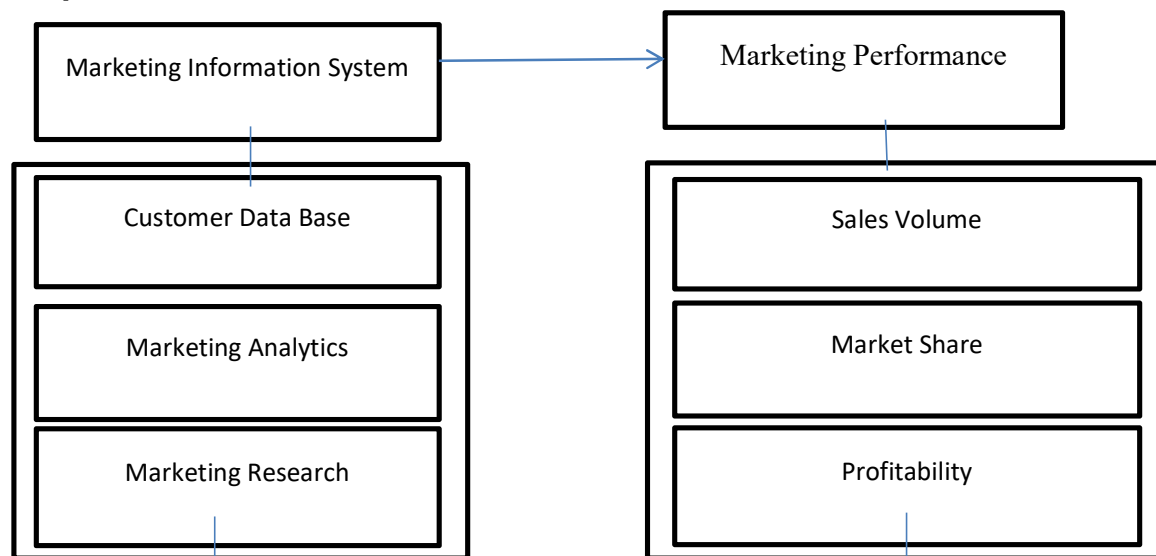


Figure 1: Marketing information system and marketing performance of food and beverage firms in Port Harcourt.
Source: Adopted from (Sääksjärvi, & Talvinen, 2018; Abusweilem & Abualoush, 2019).

Aim and Objectives of the Study

The primary aim of this study is to investigate marketing information system and customer patronage of food and beverages firms in Port Harcourt. The specific objectives are to:

1. Find out the relationship between customer data base and sales volume of food and beverages firms in Port Harcourt.
2. Examine the relationship between marketing analytics and market share of food and beverages firms in Port Harcourt.
3. Determine the relationship between marketing research and profitability of food and beverages firms in Port Harcourt.

Research Questions

The study was guided by the following research questions:

1. How significant is customer data base on sales volume of food and beverages firms in Port Harcourt?
2. What relationship exists between marketing analytics and market share of food and beverages firms in Port Harcourt?
3. How significant is marketing research and profitability of food and beverages firms in Port Harcourt?

Research Hypotheses

The study hypotheses will be stated in null form and acceptance or rejection of which will help to reinforce the findings of the study:

H0₁: There is no significant relationship between customer data base and sales volume of food and beverages firms in Port Harcourt.

H0₂: There is no significant relationship between marketing analytics and market share of food and beverages firms in Port Harcourt.

H0₃: There is no significant relationship between marketing research and profitability of food and beverages firms in Port Harcourt.

Significance of the Study

The increased interest in this study is its ability to unravel the impact of marketing information system on customer patronage of food and beverages firms in Port Harcourt, which will be of immense benefit to captains of industries and managers to make better-informed decisions about marketing strategies, product development, and resource allocation.

Consumers will benefit from this study as they can now enjoy significantly improved offerings from businesses, get consulted or making input to what products they buy and gain satisfaction as firms strive providing needed quality.

Other scholars and researchers on similar study will find the study very interesting and significant, tapping from its rich literature, which could be a veritable reference point.

LITERATURE REVIEW

Conceptual Review

Concept of Marketing Information System

A marketing information system is a management information system developed to sustain advertising decision-making (Hess, Rubin & West, 2017). It combines several sorts

of data, individuals, mechanisms and procedures to assist a company in making better decisions. Kotler (2004) has defined marketing information system extensively as people, agencies and processes to collect, type, analyze, determine and disperse required, timely and precise information to advertising decision-makers. A study by Bartlett and Ghoshal (2019) argued that promoting information systems give the information technology foundation for the marketing companies' calculated procedures. In a large view, the marketing information system develops an arranged and timely flow of details needed by marketing choice makers. An ideal informational system makes it possible for the business to create its task and supply new services and products, modifying work processes and even considerably progressing organization and business procedure (Davenport & Short, 2018). As a result of advertising, managers require complete information. Marketing information system is a complex network, made up of interrelated- relations between individuals, machines, and process to give a flow of organized details, counting on the inner and exterior resources of the establishment which directed primarily to the formulation of advertising decisions foundation. Marketing is a social and supervisory approach through which people and teams acquire what they want and needs by developing, supplying and trading product or services of value with partners (Siddiqui & Alam, 2017).

No doubt, businesses can use information to control their pricing strategy, develop more effective marketing campaigns, and devise relevant offers at the ideal location and appropriate time, since marketing information systems enable companies to significantly improve their offerings and the quality of their decisions. It has rightly been observed that lots of companies stop working to understand that the survival of their items in the competitive market is a function of their commitment to structure and preserving trustworthy marketing details system that is all including and all accepting. Due to this lot of firms in developing nations are typically effective for a temporary period of time as they introduced a new eye-catching item or an attracting solution, but find it tough to be competitive over a longer time period because of failure to consistently collect details regarding the modifications in market situation (Asikhia, 2019). Good marketing information system therefore gives correct data on controllable and non-controllable elements and customers that improves the effectiveness of choices made by marketing managers (Alejandro, 2018).

Moreover, it was reported by Calvano and Polo (2021) that marketing information system has a positive effect on market performance. Clients can easily move their service to another supplier with the click of a computer mouse. They can get the very same price information as their distributors and they require twenty-four-seven client service. Consumers currently have virtually unlimited capability for interactions with firms with Internet in addition to the conventional phone and mail techniques. Business web platforms initiate information search, shopping and consumer assistance. Email interaction can target certain deals on face-to-face basis. Recognizing and satisfying requiring expectations has placed a renewed emphasis on managing client partnerships.

Marketing information system plays vital duty in increasing the efficiency of financial performance to the business in majorly competitive sectors, by giving out the needed data for the numerous management levels (Leonidou & Theodosiou, 2021). Marketing information system has been required by advertising monitoring for the objective of determining, measuring, and projecting advertising and marketing possibilities, analyzing of market sections. Marketing information system contains individuals, facilities, and

incorporated process that utilized to supply administration with exact and managed information about the atmosphere-related marketing, which assist decision makers to quest chances and come up with methods and marketing strategies (Monday, 2018). Marketing information system is a complex network, made up of interrelated-relations between individuals, machines, and process to give a flow of organized details, counting on the inner and exterior resources of the establishment which directed primarily to the formulation of advertising decisions foundation.

Benefits of Marketing Information System

Marketing Information System (MIS) begins and ends with the marketing managers to assess their information needs and also develop the needed information from internal company records, marketing intelligence activities and marketing research process. In addition, the marketing information system distributes information to managers in the right form and at the right time to help them in marketing planning, implementation and control (Lancaster, 1993). Some of the benefits to Lancaster, (1993) are identified and discussed below:

Improved decision-making: A marketing information system provides relevant and timely information about customers, competitors, and the market, enabling companies to make better-informed decisions about marketing strategies, product development, and resource allocation.

Enhanced customer insights: A marketing information system enables companies to gather and analyze customer data, including preferences, behaviors, and feedback. This helps companies better understand their customers and develop more effective marketing campaigns and product offerings.

Increased profitability: A marketing information system can help companies identify new market opportunities, optimize pricing strategies, and reduce costs. Companies can increase revenue and profitability by improving their marketing and sales efforts.

Competitive advantage: Using MIS lets companies stay updated with market trends and competitor activities. This information can be used to develop more effective marketing strategies and gain a competitive advantage in the market.

Customer Data Base

Your customer base is the group of people who repeatedly buy your company's products or use your organization's services. These customers frequently engage with your business and provide the most financial value to your company. In creating customer data base, Abusweilem and Abualoush, (2019) considered the following steps to create a customer database:

Define the database functions. It's important to define and understand your customer database functions. Identify the information sources. Select the type of database. Structure the data. Expand the database. Develop a regular maintenance program. There are many methods of data collection, both qualitative and quantitative. Qualitative data gives personal insight from your consumers, such as complaints, suggestions, feedback, and praise. Quantitative data is usually numerical, such as site traffic statistics, transaction data, and sales records. Customer data is the behavioral, demographic and personal

information about customers collected by businesses and marketing companies to understand communicate and engage with customers. A customer database will give you information about clients' and customers' lives, their movements, preferences and resulting commercial trends, which can aid sales and services.

Benefits of Using Customer Data

By analyzing your customer database, you can identify who your best customers are, create better campaigns to attract more customers like them, and retain the existing top customers. The way you leverage customer data reflects in your profit margins, retention rates, and customer lifetime value. Your customer base is the group of people who repeatedly buy your company's products or use your organization's services. These customers frequently engage with your business and provide the most financial value to your company. A customer database will give you information about clients' and customers' lives, their movements, preferences and resulting commercial trends, which can aid sales and services. Learn the definitions and benefits of using customer databases. The customers of a business are the most important asset a company can have. Depending on the type of industry, a company may sell to the same customers over and over. There are other types of businesses that sell to a customer once or infrequently and are constantly looking for new customers. For instance, a surgeon may do a surgery on a person one time, and that patient may never require another surgery. On the other hand, a dentist sees their patients once or twice a year on an ongoing basis. The way they interact with their customers will be different because of the need of their services. As a result, the way a company uses customer information can be very important. A customer database is the collection of information that is gathered from each person. The database may include contact information, like the person's name, address, phone number, and e-mail address. The database may also include past purchases and future needs.

Marketing Analytics

Marketing analytics is the study of data to evaluate the performance of a marketing activity. By applying technology and analytical processes to marketing-related data, businesses can understand what drives consumer actions, refine their marketing campaigns and optimize their return on investment. Marketing analytics is the practice of using data to evaluate the effectiveness and success of marketing activities. Marketing analytics allows you to gather deeper consumer insights, optimize your marketing objectives, and get a better return on investment. Marketing analytics benefits both marketers and consumers. This analysis allows marketers to achieve higher ROI on marketing investments by understanding what is successful in driving conversions, brand awareness, or both. Analytics also ensures that consumers see a greater number of targeted, personalized ads that speak to their specific needs and interests, rather than mass communications that tend to annoy. Marketing data can be analyzed using a variety of methods and models depending on the KPIs being measured. For example, analysis of brand awareness relies upon different data and models than analysis of conversions.

Marketing Research

Green, Tull and Albaum, (1993), have defined marketing research as follows:

"Marketing research is the systematic and objective search for, and analysis of, information relevant to the identification and solution of any problem in the field of marketing."

The key words in this definition are; systematic, objective and analysis. Marketing research seeks to set about its task in a systematic and objective fashion. This means that a detailed and carefully designed research plan is developed in which each stage of the research is specified. Such a research plan is only considered adequate if it specifies: the research problem in concise and precise terms, the information necessary to address the problem, the methods to be employed in gathering the information and the analytical techniques to be used to interpret it.

Marketing research in so much that it serves to reduce rather than remove the risks attendant to decision making. The discussion proceeds to an outline of the research brief which has to be drawn up for the guidance of the individual or group charged with executing the study. At this point, the researcher has to respond to the brief with a research design. In this text an eight step research design is proposed and the reader will find a fairly thorough discussion of each of these steps within the chapter.

The Role and Limitations of Marketing Research

To Okefor (1998) "Marketing research does not make decisions and it does not guarantee success". Marketing managers may seek advice from marketing research specialists, and indeed it is important that research reports should specify alternative courses of action and the probability of success, where possible, of these alternatives. However, it is marketing managers who make the final marketing decision and not the researcher. The second observation, that marketing research does not guarantee success, is simply recognition of the environment within which marketing takes place. In the fields of science and engineering researchers are often working with deterministic models of the world where $y = f(x)$. That is, x is a necessary and sufficient condition for y to occur. For instance, an increase in pressure is usually necessary and sufficient to bring about a rise in air temperature. In the social sciences, and this includes marketing and marketing research, the phenomenon under investigation rarely, if ever, lends itself to deterministic modelling. Consider the marketing problem of determining how much to spend on promotion in order to achieve a given market share. The link between promotional expenditure and sales is not so direct as that between pressure and temperature. There are a great many more intervening variables, including: the media used, the effectiveness of the promotional message, the length and frequency of the campaign, not to mention the many dimensions of the product, price and distribution. Marketing researchers work with probabilistic models of the form:

$$y = f(x_1)..f(x_2)...f(x_n)...$$

This reflects the fact that in order for a target market share to be reached some promotion (amount unknown) is necessary but will not be sufficient, on its own, to achieve the target. Y is a function of a number of variables and the interactions between them. The model is further complicated by the fact that these interactions are themselves often not understood. It is for these reasons that marketing researchers cannot guarantee that decisions based on their information will always prove 'successful'. Rather the best that a competent researcher and a well-designed study will be able to offer is a reduction in the amount of uncertainty surrounding the decision.

Maintaining objectivity in marketing research is essential if marketing management is to have sufficient confidence in its results to be prepared to take risky decisions based upon those results. To this end, as far as possible, marketing researchers employ the scientific method. The characteristics of the scientific method are that it translates personal prejudices, notions and opinions into explicit propositions (or hypotheses). These are tested empirically. At the same time alternative explanations of the event or phenomena of interest are given equal consideration. Looking at how market research help sales Abadom and Chukundah (2013) noted that it helps determine who and where your customers are, and which customers are most likely to do business with you. (In fact, for customers who indicate that they don't want to do business with you, market research is your opportunity to ask them "why not?") Sales performance is about the overall effectiveness of an organization's sales team. It's a measure of both individual reps' performance and that of the sales team as a whole. Performance is assessed based on individuals' and teams selling activities and how well they achieve their sales targets.

Marketing Information System and Firms Performance

Rad, Massafi and Tak (2019) examined the role of marketing informational systems on performance. Nowadays information is regarded as powerful resource and having required knowledge of customer requirements and related factors play key role at organizations. On the other hand, through developing effective factors on success activities, it is required for having enough knowledge about these factors. Therefore, those managers are successful having highest and most important information for making correct decision. The study found that marketing informational systems has a positive influence on performance. If management is defined as foresightedness, it is equivalent to information management. Marketing information system plays vital duty in increasing the efficiency of financial performance to the business in majorly competitive sectors, by giving out the needed data for the numerous management levels (Leonidou & Theodosiou, 2021). Marketing information system has been required by advertising monitoring for the objective of determining, measuring, and projecting advertising and marketing possibilities, analyzing of market sections. Marketing information system contains individuals, facilities, and incorporated process that utilized to supply administration with exact and managed information about the atmosphere-related marketing, which assist decision makers to quest chances and come up with methods and marketing strategies (Monday, 2018).

Theoretical Review

Two Ways Communication Theory

Two-way communication is a form of transmission in which both parties involved transmit information. Two-way communication has also been referred to as interpersonal communication. Common forms of two-way communication are: chatting via computer network, social network, twitter, you tube etc. The thrust being that that two-way communication occurs when the receiver provides feedback to the sender. For instance, management as sender create a content and send a message on content ads and employees or customers replies the message called feedback for the sender to establish whether the message was understood or not. Hoffman one-to-many-to-one communication model is equally appropriate.

Interactive Marketing Theory

Interactive marketing is a type of advertising that includes several types of Internet sales strategies. These include social networking, website architecture and online stores. In today's world of modern technology and e-commerce, many product and service providers are finding that interactive marketing online as cost-effective and provides several advantages. For instance, with interactive marketing, the customer is involved in a company's ad campaign, instead of passively listening to a radio broadcast or watching a television commercial (Contractor, 2003).

Empirical Review

The Research Marketing (2020) study examined the effect of marketing information system on sales performance of selected industrial products in Port Harcourt. The sample technic and size of the study was judgmental sample of 65 respondents which comprise of both the senior and junior staff of Cakasa Nigeria Company Limited, DTS Global Concept Limited, and Oco Industrial Services Limited, all in Port Harcourt. Both primary and secondary data was used for the study. The statistical test used in the analysis of the data collected was the Pearson Product Moment Correlation (PPMC). From the analysis, it was observed that the dimensions of marketing information system significantly influences sales performance of selected industrial products in Port Harcourt. Based on the above, the following recommendations were made among others: An effective computerised information system should be adopted by industrial products which will make their marketing information system more effective and reliable for sustainability and global visibility, that management of industrial products must pay great attention to the marketing research department and that research activity should be the priority in of the firms.

Krasnikov, and Jayachandran, (2008) studied the relative impact of marketing, research-and-development, and operations capabilities on firm performance, stressing that the impact of the marketing function on firm performance has been the focus of much recent research in marketing. Thus, the effect of marketing capability on firm performance, compared with that of other capabilities, such as research and development and operations, is an issue of importance to managers. To examine this issue and generate empirical generalizations, the authors conducted a meta-analysis of the firm capability–performance relationship using a mixed-effects model. The results show that, in general, marketing capability has a stronger impact on firm performance than research-and-development and operations capabilities. The results provide guidelines for managers and generate directions for further research.

Theodosiou and Beheshti (2021) carried out study on relationship between marketing information system and performance of SMEs in in Malaysia under the following: Purpose of the study: The study sought to examine the relationship between marketing information systems and the performance of SMEs In Malaysia Statement of the problem: The performance of the SMEs in Malaysian has not been much effective. Some of the SMEs have liquidated their operations due to low sales. It was noted that around 65% of the SMEs cease operations before three years in operations. Thus, the study sought to investigate the reason behind the majority of the SMEs not surviving for long. Therefore, the study examined the relationship between marketing information systems and the performance of SMEs in Malaysia. Research Methodology: The study was literature-based. The inferences of the study were based on the findings from the preceding studies.

Research Findings: It was found that the marketing information system has a positive effect on the performance of SMEs in Malaysia. The study indicated that a marketing information system is a management information system designed to support marketing decision making. Marketing information system plays an essential duty in increasing the efficiency of financial performance to the business in highly competitive markets through providing the needed information for the different administrative levels. Conclusion: It was concluded that the marketing information system is potent in ensuring the performance is enhanced among the SMEs. The marketing information system is essential in increasing sales and firms can use various techniques, networks, and approaches to promote their products. The study further concluded that companies with reliable and efficient advertising and marketing details systems tend to create competitive items that will fulfill existing and potential buyers' demands in the market, thus more sales. Recommendations: The study recommended that SMEs should enhance the use of marketing information systems. The marketing details system allows the organization to evaluate the market correctly and acquire details needed to critically examine its possibilities and select its target audience to make most of its profit.

A study was conducted by Alhadid, Al-Zu'bi and Samer (2020) to investigate the relationship between marketing information system and gaining competitive advantage in the banking sector in Jordan. It explores the usefulness of the use of information technology in achieving competitive advantage. It also aims to relate the components of marketing information systems with the competitive advantage in the banking sector. The researchers obtained secondary data from documented sources and primary data from the use of a questionnaire. The results of the analysis showed that there is a positive relationship between the internal records, marketing research, and marketing intelligence and achieving competitive advantage in the Jordan Baking Sector. The results also indicated that only two traits; age and educational Level, had a relationship with marketing information system. However, there was no significant relationship between gender, Experience Years and of respondents and their perceptions of marketing information system.

Rad, Massafi and Tak (2019) examined the role of marketing informational systems on performance. Nowadays information is regarded as powerful resource and having required knowledge of customer requirements and related factors play key role at organizations. On the other hand, through developing effective factors on success activities, it is required for having enough knowledge about these factors. Therefore, those managers are successful having highest and most important information for making correct decision. The study found that marketing informational systems has a positive influence on performance. If management is defined as foresightedness, it is equivalent to information management.

RESEARCH METHODOLOGY

Research Design

The research design of a study is the framework or a plan of actions aimed at carrying out a research study and it is used as a guide in collecting and analyzing data (Olannye, 2006). This study engaged the survey research design method for the purpose of collecting data for empirical analytical purpose as it relates to the respondents view on marketing information system and marketing performance of food and beverage firms. The justification for choosing this method is that it enabled

the researcher to collect the needed data to answer the research questions and to appropriately explain the relationship among the variables of our construct in our conceptual framework.

Research Population

For the purpose of this study, the target population consists of all food and beverage firms operating in Port Harcourt, while the accessible population was 20 registered food and beverage firms operating in Port Harcourt. Hence, a census study of the entire 20 food and beverage firm carried out that equally met the criteria below:

- a. Food and beverage firms must be registered and permitted to operate in Rivers State and situate in Port Harcourt metropolis.
- b. Food and beverage firms must have been in business for at least two year.

A purposive sampling technique was adopted to select the respondents to the questions in the research instrument for this study.

Instrument of Data Collection

The research instrument used for data collection for this study was a well-structured questionnaire for management and customers of the food and beverage service providers in Port Harcourt, Rivers State.

Validation of the Instrument

The research instrument used in this study was subjected to scrutiny and scholarly perused by marketing experts. They particularly emphasized on the content and construct components of the instrument. Their observations, corrections and critiques were incorporated in the final form of the research instrument.

Reliability of Instrument

In order to establish or determine the reliability of the research instrument, the split-half method was adopted. Since two categories of respondents - the customers and the service providers in the food and beverage firms were considered, two groups, therefore, of 100 customers and 25 service providers were selected for the purpose of determining the reliability of the research instrument. Each of these groups was split into two halves, after the instrument had been administered and retrieved, using even and odd numbers to separate responses of the respondents. The even and odd groups representing the two halves were correlated using Karl Pearson Product Moment Correlation method. Then, the reliability on the full test was given by Spearman Brown formula:

$$r_f = \frac{2 \times \text{reliability on } 1/2 \text{ test}}{1 + \text{reliability on } 1/2 \text{ test}}$$

i.e., $r_f = \frac{2 \times r_{1/2}}{1 + r_{1/2}}$

$r_{1/2}$ for the customers and service providers were obtained as 0.78 and 0.82 respectively.

Thus, the reliability on full test for the customers and service providers are respectively obtained as follows:

$$r_{fc} = \frac{2 \times 0.78}{1 + 0.78} = \frac{1.56}{1.78} = 0.8764$$

= 0.8764 or 87.64%

and $r_{fc} = \frac{2 \times 0.82}{1 + 0.82} = \frac{1.64}{1.82} = 0.9011$

= 0.9011 or 90.11%

These reliability coefficients indicate that the instrument was reliable.

Method of Data Collection

The copies of the research instrument were administered in a drop – and – pick basis personally by the researcher

The table below depicts the administration and retrieval distribution instrument.

Table 3.1: Distribution of copies of the Research Instrument to the Customers and Staff of the selected food and beverage firms in Port Harcourt

Category of Respondents	Number of Copies		Percentage
	Administered	Retrieved	
Customers	1,500	1,500	100
food and beverage Provider	200	200	100

20 food and beverage firms were selected. 10 staff of the food and beverage providers and 75 purposively selected customers was considered for each food and beverage firms. These cumulated to 200 and 1,500 staff and customers respectively.

Method of Data Analysis

Descriptive and inferential parametric statistics were employed in the analysis of the collated data from the customers and staff of the food and beverage firms in Port Harcourt, Rivers State. The descriptive statistics used include arithmetic means, variances and standard deviations, and the inferential parametric statistic used was Pearson Product moment Correlation Coefficient (r) to test the formulated hypotheses. The SPSS (Statistical bundle for Social Sciences) version 25 aided correlating the statistics at the independent and dependent variables.

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

This chapter presents the analysis of data and results of the findings gathered from the research questions as well as test the corresponding hypothesis. The null hypotheses would be rejected for alternative hypothesis if p-value (0.000) is less than the level of significant at 95% (0.05) as our established decision rule, on the other hand accept H0: if the p-value of the independent variable is greater than 0.05. If the p-value of the independent variable is less than 0.05, then it means that the variable is significantly contributing to the variations in the dependent variable vice versa.

Data Analysis

One hundred and four (104) copies of questionnaire were distributed among the top management of selected food and beverages firms in Port Harcourt. 98(94.2%) copies were accurately filled while the remaining 6(5.8%) contained certain inconsistencies, and thus not valid for analysis. Therefore, the analysis was based on 98 copies accurately filled.

Research Question One

RQ1: How significant is customer data base on sales volume of food and beverages firms in Port Harcourt?

H0₁: There is no significant relationship between customer data base and sales volume of food and beverages firms in Port Harcourt

Table 4.1: Summary result of Spearman correlation of relationship between customer data base and sales volume of food and beverages firms

			Customer data base	Sales volume
Spearman's rho	Customer data base	Correlation	1.000	.833**
		Coefficient sig.(2-tailed)	.000	.000
		N	98	98
	Sales volume	Correlation	.833**	1.000
		Coefficient sig.(2-tailed)	.000	0.000
		N	98	98

** . Correlation is significant at the 0.05 level (2-tailed)

From table 4.1; Spearman Rank Correlation is used to analyze the relationship between customer data base and sales volume of food and beverages firms in Port Harcourt. The results shown that customer database at ($P < 0.05$) and $\rho = 0.833$ and a P-value = 0.000 significantly relates with sales volume. This result ascertains that customer database has a significant and positive relationship with sales volume of food and beverages firms in Port Harcourt. Therefore, the null hypothesis is rejected for alternative of H_{01} , because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule. Meaning there is a significant relationship between customer data base and sales volume of food and beverages firms in Port Harcourt.

Research Question Two

RQ2: What relationship exists between marketing analytics and market share of food and beverages firms in Port Harcourt?

H0₂: There is no significant relationship between marketing analytics and market share of food and beverages firms in Port Harcourt.

Table 4.2: Summary result of Spearman correlation of relationship between marketing analytics and market share of food and beverages firms

			marketing analytics	market share
Spearman's rho	marketing analytics	Correlation	1.000	.805**
		Coefficient sig.(2-tailed)	.000	.000
		N	98	98
	market share	Correlation	.805**	1.000
		Coefficient sig.(2-tailed)	.000	0.000
		N	98	98

** . Correlation is significant at the 0.05 level (2-tailed)

From table 4.2; Spearman Rank Correlation is used to analyze the relationship between marketing analytics and market share of food and beverages firms in Port Harcourt. The results illustrate that marketing analytics has a significant relationship with market share at a rho = 0.805 and a P-value = 0.000. This result determines that marketing analytics has a significant and positive relationship with market share of food and beverages firms in Port Harcourt. Therefore, Ho₂ is rejected, because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule. Meaning there is a significant relationship between marketing analytics and market share of food and beverages firms in Port Harcourt.

Research Question Three

RQ3: What relationship exists between marketing research and profitability of food and beverages firms in Port Harcourt?

HO₃: There is no significant relationship between marketing research and profitability of food and beverages firms in Port Harcourt

Table 4.3: Summary result of Spearman correlation of relationship marketing research and profitability of food and beverages firms

		marketing research	profitability
Spearman's rho	marketing research	Correlation	1.000
		Coefficient	.876**
		sig.(2-tailed)	.000
	Profitability	N	98
		Correlation	.876**
		Coefficient	1.000
	sig.(2-tailed)	.000	
	N	98	

** . Correlation is significant at the 0.05 level (2-tailed)

From table 4.3; Spearman Rank Correlation is used to analyze the relationship between marketing research and profitability of food and beverages firms in Port Harcourt. The results shown that marketing research at (P<0.05) and rho = 0.876 and a P-value = 0.000 significantly relates with profitability. This result upheld that marketing research has a significant and positive relationship with profitability of food and beverages firms in Port Harcourt. Therefore, the null hypothesis is reject for alternative of Ho₃, because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule. Meaning there is a significant relationship between marketing research and profitability of food and beverages firms in Port Harcourt.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

Our study on marketing information system and marketing performance of food and beverages firms in Port Harcourt found that significant relationship exist between customer data base and sales volume of food and beverages firms in Port Harcourt. It was discovered that marketing information system is important in the increment of sales of a particular item, and different companies, firms and organizations make use of different methods, networks and approaches of advertising its products. The study found

that that customer database at ($P < 0.05$) and $\rho = 0.833$ and a P -value = 0.000 significantly relates with sales volume. Hence, ascertains that customer database has a significant and positive relationship with sales volume of food and beverages firms in Port Harcourt.

It was equally found that significant relationship exist between marketing analytics and market share of food and beverages firms in Port Harcourt. The test result of the corresponding hypothesis results illustrated that marketing analytics has a significant relationship with market share at a $\rho = 0.805$ and a P -value = 0.000. This result maintained that marketing analytics has a significant and positive relationship with market share of food and beverages firms in Port Harcourt.

The study equally revealed that significant relationship exist between marketing research and profitability of food and beverages firms in Port Harcourt, indicating that benefits of market research cannot be overemphasized, ensuring meeting and responding to customers' needs and want. The results of corresponding hypothesis test revealed and upheld that marketing research at ($P < 0.05$) and $\rho = 0.876$ and a P -value = 0.000 significantly relates with profitability.

CONCLUSIONS

Based on the findings, the following conclusions were drawn

1. There is significant relationship between customer data base and sales volume of food and beverages firms in Port Harcourt, this is because the result of test of the corresponding hypothesis customer database at ($P < 0.05$) and $\rho = 0.833$ and a P -value = 0.000 significantly relates with sales volume.
2. There is significant relationship between marketing analytics and market share of food and beverages firms in Port Harcourt from corresponding test result at a $\rho = 0.805$ and a P -value = 0.000.
3. There is significant relationship between marketing research and profitability of food and beverages firms in Port Harcourt since corresponding hypothesis test result revealed marketing research at ($P < 0.05$) and $\rho = 0.876$ and a P -value = 0.000. is less than the level of significant at 95% (0.05).

RECOMMENDATIONS

Based on the findings and conclusions thereof, the following recommendations are put forward

1. Food and beverage firms should make use of the internet in gathering customer data online improving their marketing information systems because new company designs existing obstacles and chances exist as firms look for to take on e-business strategies in the search for increase in sales and competitive advantage.
2. Concerted efforts need be taken in use of modern marketing information systems developed to manage their client user interface where interactions are more virtual than in person, taking advantage of IT modern technology to incorporate and coordinate with consumers and service partners to rapidly obtain measurable organization outcomes of wider market.
3. Firms should regularly carry out market research to be abreast with trends, meeting needs and wants of their customers, knowing that management may not have the ability to alter consumer demands and wants, new rival campaigns, altering market trends and so on, but it can establish and handle a better details

system that can boost its competitive edge in the target audience carrying out well organized market research.

4. The food and beverage firms should regularly update on their customer, who they are to strive reaching them and giving them deserved attention in order not to lose customers, retain the profitable group as to continue in business.
5. The study strongly recommends integration of marketing information system to gain needed synergy having much market share and profitability knowing that one of the main determinants of business profitability is market share.

REFERENCES

- Abadom, F.A. & Chukundah, T.T. (2013). Marketing in corporate organization. Port Harcourt, Emeks enterprise.
- Adeoti, J. O., Olawale, Y. A., & Abolarinwa, O. O. (2017). Impact of Marketing Information System on Product Performance in Nigerian Bottling Company Limited. *KIU. Journal of social sciences*, 2(2), 221-236.
- Agarwal, S., Erramilli, M. K., & Dev, C. S. (2019). Market orientation and performance in service firms: role of innovation. *Journal of services marketing*.
- Alejandro, J. (2018). Journalism in the age of social media. Reuters Institute Fellowship, 5, 1-47.
- Alhadid, Y., Al-Zu'bi, H., & Samer, B. (2020). The relationship between marketing information system and gaining competitive advantage in the banking sector in Jordan. *European journal of scientific research*, 128(1), 35-44.
- Anshari, M., Almunawar, M. N., Lim, S. A., & Al-Mudimigh, A. (2019). Customer relationship management and big data enabled: Personalization & customization of services. *Journal of applied computing and informatics*, 15(2), 94-101.
- Asikhia, O. (2019). Customer orientation and firm performance among Nigerian small and medium scale businesses. *International journal of marketing studies*, 2(1), 197.
- Bartlett, C. A., & Ghoshal, S. (2019). Building competitive advantage through people. *MIT Sloan management review*, 43(2), 34.
- Beheshti, H. M. (2018). What managers should know about ERP/ERP II. *Management Research News*.
- Bossetta, M. (2018). The digital architectures of social media: Comparing political campaigning on Facebook, Twitter, Instagram, and Snapchat in the 2018 US election. *Journal of journalism & mass communication quarterly*, 95(2), 471-496.
- Bresnahan, T., Gambardella, A., & Saxenian, A. (2021). 'Old economy' inputs for 'new economy' outcomes: Cluster formation in the new Silicon Valleys. *Journal of industrial and corporate change*, 10(4), 835-860.

- Buhalis, D. (2020). Marketing the competitive destination of the future. *Journal of tourism management*, 21(1), 97-116.
- Calvano, E., & Polo, M. (2021). Market power, competition and innovation in digital markets: A survey. *Journal of information economics and policy*, 54, 100853.
- Chen, I. J., & Popovich, K. (2018). Understanding customer relationship management (CRM): People, process and technology. *Business process management journal*.
- Davenport, T. H., & Short, J. E. (2018). The new industrial engineering: information technology and business process redesign.
- Graesch, J. P., Hensel-Börner, S., & Henseler, J. (2020). Information technology and marketing: an important partnership for decades. *Journal of industrial management & data systems*.
- Green, P.E., Tull, D.S. and Albaum, G (1993), *Research for marketing decisions*, 5th edition, Prentice-Hall.
- Hammer, M., & Stanton, S. (2019). How process enterprises really work. *Harvard business review*, 77, 108-120.
- Harmon, R. R. (2021). Marketing Information Systems. *Encyclopedia of information systems*, 3, 137-151.
- Hess, R. L., Rubin, R. S., & West Jr, L. A. (2017). Geographic information systems as a marketing information system technology. *Decision Support Systems*, 38(2), 197-212.
- Hopkins, J. (2019). Communication, Culture, and Governance in Asia|“We Connect With People Through Stories”: Gender and Affective Labor in Momblogging. *International Journal of Communication*, 13, 20.
- Jüttner, U., Christopher, M., & Baker, S. (2021). Demand chain management-integrating marketing and supply chain management. *Journal of Industrial marketing management*, 36(3), 377-392.
- Kerlinger, F.N.(1994) *Foundations of Behavioural Research*, 1st edition, Holt, Rinehart and Winston, 174.
- Ketchen Jr, D. J., & Hult, G. T. M. (2018). Bridging organization theory and supply chain management: The case of best value supply chains. *Journal of operations management*, 25(2), 573-580.
- Krasnikov, V. & Jayachandran, S. (2008). The Relative Impact of Marketing, Research-and-Development, and Operations Capabilities on Firm Performance. *Journal of marketing*, 72(4):1-11
- Leonidou, L. C., & Theodosiou, M. (2021). The export marketing information system: an integration of the extant knowledge. *Journal of world business*, 39(1), 12-36.
- Levin, D., & Arafeh, S. (2020). The digital disconnect: The widening gap between Internet-savvy students and their schools.

- Loo, M. K. L. (2019). Enhancing Financial Inclusion in ASEAN: Identifying the Best Growth Markets for Fintech. *Journal of Risk and Financial Management*, 12(4), 181.
- Monday, A. J. (2018). The role of information in marketing decision. *International Journal of Public Administration and Management Research*, 2(3), 109-121.
- Nova, T. P., Hoffman, D. L., & Yung, Y. F. (2020). Measuring the customer experience in online environments: A structural modeling approach. *Journal of marketing science*, 19(1), 22-42.
- Okeafor, U. (1998). Marketing research and project writing guide. Lagos. World communication ltd.
- Rad, A. H. S., Massafi, S., & Tak, F. R. (2019). Role of informational systems on marketing. Kuwait Chapter of the *Arabian Journal of Business and Management Review*, 2(5), 143.
- Sääksjärvi, M. V., & Talvinen, J. M. (2018). Integration and effectiveness of marketing information systems. *European Journal of marketing*, 27(1), 64-80.
- Siddiqui, M. S., & Alam, A. (2017). A Study on Factors Affecting Purchase Decision Based On Awareness, Affordability, Adoptability And Availability In Reference To Hul And Fmcg Companies In Rural India.
- Slater, S. F., & Narver, J. C. (2018). Market orientation, customer value, and superior performance. *Business horizons*, 37(2), 22-28.
- Theodosiou, A.A. & Beheshti, M. (2021). Relationship between marketing information system and performance of SMEs in in Malaysia. *African journal of emerging issues (AJOEI)*. Online ISSN: 2663-9335, 3(10),15-24.