MARKETING INFORMATION SYSTEM: AN ALTERNATIVE PARADIGM FOR ORGANIZATIONAL PERFORMANCE
(A STUDY OF FIVE MANUFACTURING COMPANIES IN OYO STATE)

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ABSTRACT

The information age holds a number of daunting challenges for modern organizations, and more specifically, modern marketers. These challenges have contributed towards a fast-changing and more complex environment for organizations. This study investigated the impact of marketing information on performance of the selected manufacturing companies in Oyo State, Nigeria. Purposive method was used to select five manufacturing companies operating in Oyo State while simple random sampling technique was used to select fifty respondents for the study. Data collected through structured questionnaire was analysed with the aid of Mean, Standard Deviation and Pearson Product Moment Correlation Coefficient. Results of analysis showed that the relationship between marketing information system and performance measured by decision making, sales volume and customer satisfaction were positive and significant with r = 0.34**, 0.32**, and 035** respectively. The study concluded that Nigerian manufacturing sector managers' attitudes toward the importance of Marketing Information System (MKIS) applications in business organisations are positive. This can help in improving the situation in the future. Therefore, the study recommended that Nigeria manufacturing companies must work to make the marketing information system unit, administratively and financially separate and independent from marketing department. MKIS should be given a prominent place in the organizational structure, to be able to perform its functions without association with the marketing management or other administrations in the company.

Keywords: Marketing Information System, Information Technology, Performance, Manufacturing, Nigeria.

Introduction

Research has shown that businesses worldwide have entered an era of information explosion. The information age holds a number of daunting challenges for modern organizations, and more specifically, modern marketers. These challenges have contributed towards a fast-changing and more complex environment for organizations (**Moniei & Najafzadeh, 2015**). Quite information of this is the fact that, most of the public and private sectors in Nigeria have witnessed several cases of collapses, while surviving ones are sick and ailing. Generally, organizations worldwide experience the same kinds of information

problems, which are more acute in developing countries. They are hampered by insufficient information and knowledge (Silvance, 2012), which plays a key role in coping with change, and may be a possible reason for the poor performance in satisfying customer requirements. To support this observation, Ezekiel, Eze and Anyadighibe (2013) observed that many organizations particularly in Nigeria are moribund due to the wave of information technology.

Marketing Information System (MKIS) has been recognised by scholars and professionals in the field of marketing as a factor that plays an important role in raising the efficiency of economic performance to the companies in highly competitive markets, through providing the necessary information for the various administrative levels. According to Turkaman (2012), Marketing Information System has completely improved efficiency and effectiveness of companies and organizations and it is considered as a competitive advantage. A marketing information system must not only be as a centre for storing all relevant information relating to the company's customers but also have the ability to collect, store and analyze information related to the marketing mixtures, competitors, environmental macro variables and internal documents of the company. Marketing Information Systems enable marketing and sales managers to identify, interpret, and react to competitive signals and are key elements leading to efficient marketing strategies and sales promotion strategies (Prabhu & Stewart, 2005).

It is based on this background that this study intends to investigate the impact of Marketing Information System on performance of some the selected manufacturing companies in Oyo State, Nigeria.

Research Question
i.   Is there any significant relationship between Marketing Information System and organizational performance measured by effective decision making, sales volume and customer satisfaction?

Research Hypothesis
H_o: There is no significant relationship between Marketing Information System and organizational performance measured by effective decision making, sales volume and customer satisfaction.

Review of Related Literature and Formulation of Hypothesis
The concept of MKIS has no formal links with any specific technology, and is regarded by early exponents to be a conceptual system, in which the flow of information is the essential element. Technology plays a secondary role. However, Information Technology (IT) has developed so rapidly, and has become so prevalent in organizations, that virtually all decisions involve some interactions with technology. Also, the marketing function promises

to benefit greatly through the use of IT (Moriarty & Swartz, 1989). Based on above reasons, it is impossible to conduct any study of MKIS without taking into account the role of technology. The focus of the MKIS is information, often 'creating' data by various collection methods such as marketing research and market intelligence programs. It provides the marketing decision-maker with data in general and summarized format. The burden is on the decision-maker to select the useful information. Mohan and Holstein (2014) describe this situation as an overload of data, but with a lack of meaningful information. The MKIS developed after the enthusiastic reception of management information systems (Li, Mcleod & Rogers, 2013). Kotler and Keller (2012) define the Marketing Information Systems as an interacting structure of people, equipment and procedures to gather sort, analyze, evaluate and distribute, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation, and control.

In order to gain a deeper understanding of the functioning of a MKIS, it is useful to understand the components of marketing information. Kotler (2008) and Pitt and Bromfield (2004) categorize some of the components of marketing information as below.

- Marketing research, which refers to the systematic design, collection of analysis, and reporting of data and findings relevant to a specific marketing situation facing an organization. It is thus reactive and *ad hoc* by nature.
- Market intelligence, the procedures whereby everyday information is obtained. It is more proactive in nature.
- Internal reports, which consist of internal information such as sales records and reports and financial data.
- Marketing models or information analysis, which are needed as a cognitive framework in which to analyze, interpret and make sense out of data.

    A term that seems to be used often in organizations as representative of the full spectrum of marketing information is 'market intelligence' (Skyrme, 2009). That term will therefore be used in this thesis interchangeably with 'marketing information'.

Organizational Performance

According to Pitt and Tucker (2008), organizational performance is defined as "a vital sign of the organization, showing how well activities within a process or the outputs of a process achieve a specific goal". It is also defined as "a process of assessing progress towards achieving pre-determined goals, including information on the efficiency by which resources are transformed into goods and services, the quality of these outputs and outcomes, and the effectiveness of organizational objectives" (Amartunga & Baldry, 2003). Organization's performance is made visible through the activities it conducts to achieve its mission. Outputs and their effects are the most observable aspects of an organization's performance (Anderson & Carden, 1999).

Nancy and Mine (2004), on assessing organizational performance stated that most

organizations view their performance in terms of "effectiveness" in achieving their mission, purpose or goals. Most organizations, for example, would tend to link the larger notion of organizational performance to the results of their particular programs to improve the lives of a target group). At the same time, a majority of organizations also see their performance in terms of their "efficiency" in deploying resources. This relates to the optimal use of resources to obtain the results desired.

Marketing Information System and Organizational Performance

Previous studies recognised that marketing information is an important input into the organizational performance in terms of effective decision-making, increased in sales and productivity, and reduction in marketing costs and order turnaround. For example, Strydom, Jooste and Cant (2000) regard the management of marketing information as a strategic priority of the enterprise. Higgins, Mcintyre and Raine (1991) stress the importance of information in marketing by stating that the management of marketing information is crucial to the success of the organization, and that it should be integrated with the strategic planning process. **Silvance (2012) also finds out that MKIS is a strong factor that influences satisfaction of** Customers and staff of microfinance institution in Nairobi, Kenya. **Amir, Rad and Fatemeh (2013) also agree that MKIS** improved decision making for marketing managers in different organizations in Iran. In the same vein, **Freihat (2012)** also affirms that there is a statistically significant relationship between each of the following marketing information system components: (internal records, marketing research, and marketing intelligence) and decision-making. In the study of King (2010), he finds out that MKIS is not only impacts the marketing activities at organizations but influences the overall organizational activities in United State of America.

Hanif, Yunfei, Xiu-Yin, Hanif and Shareef (2013) *explore the innovative marketing information system in tourism industry of Pakistan. The study is very beneficial for hotels, fast food restaurants, tourist resorts, picnic spots and other areas of the sector to measure to what extent innovative MKIS is efficient and effective. The study reveals that MKIS has positive impact on customer satisfaction,* sales volume and decision making in Pakistan. **Mahmoud (2015) also examines** *the impact of marketing information systems on organizational performance. The study is based on using the statistical descriptive approach where the data collected through the primary and secondary sources. 130 questionnaires were distributed but 100 questionnaires were available for analysis. Means & standard deviation, One sample T-test, and simple correlation were used to analyse the data. Results show that there is a statistical significant relationship between marketing information systems, sales growth and employers' efficiency in* Saudi Arabia.

Methodology

Research Design: Descriptive survey design was used for this study. Purposive method was used to select five manufacturing companies (Bento Pharmaceutical Company, Ibadan; Yale

Nigeria Limited; Bond Pharmaceutical Company, Awe – Oyo; Sweetco Nigeria Limited, Ibadan and Black Horse Plastic Company, Ibadan) operating in Oyo State. Simple random sampling technique was used to select fifty (50) respondents for the study.

Data Collection Instruments: The data collection instruments for the study comprised of marketing information system questionnaire, decision-making questionnaire, customer satisfaction questionnaire and sales volume questionnaire which was developed and validated by the researcher. It is a Likert type scale anchored on a seven point likert scale. Its response format ranges from "Strongly Disagree" (1) to "Strongly Agree" (5). The scale was subjected to item analysis in order to ensure it is valid and reliable. It yielded reliability alpha coefficient of 0.79 which is consistent with Nunnaly and Bernstein (1994), who suggests that a reliability alpha of 0.70 is appropriate to measure any psychological construct.

Method of Data Analysis: The research data was statistically analyzed by means of the Statistical Package for Social Science (SPSS). Data analysis was performed with the aid of Mean, Standard Deviation and Pearson Product Moment Correlation Coefficient.

Results and Discussion

Relationship between Marketing Information System, Decision-Making, Sales Volume and Customer Satisfaction.

Table 1. Pearson Product Moment Correlation Showing the Relations of marketing information, decision-making, sales volume and customer satisfaction.

Variables	$\overline{X}$	SD	1	2	3	4
1. Marketing information System	56.36	7.95	-			
2. Decision making	16.17	2.27	0.34**	-		
3. Sales volume	1.53	0.56	0.32**	0.57	-	
4. Customer Satisfaction	21.24	9.54	0.35**	0.56	0.61**	-

Source: Author's Computation (2016)

Table 1 presents the result of the relationship between marketing information, decision-making, sales volume and customer satisfaction. Result of analysis shows that the relationship between decision making and marketing information system was positive and significant (r = 0.34**, P<.01). This result implies that implementation of marketing

information system will lead to effective decision making. The relationship between sales volume and marketing information system was also positive and significant (r = 0.32**, P<.01). This result indicates that *innovative marketing information system in manufacturing industry will have positive impact on sales volume.* The relationship between customer satisfaction and marketing information system was also positive and significant (r = 035**, P<.01). This result implies that marketing information system emerged as a determinant of customer satisfaction. The study is consistent with previous researchers (**Mahmoud, 2015; Amir et al., 2013; Hanif et al., (2013; Silvance, 2012; Freihat, 2012;** Tanvil *et al.,* 2008) that that marketing information system does not only impact the marketing activities at the organization level but also influence the overall organizational activities.

The implication of this study is that implementation of marketing information system in Nigerian manufacturing industry will assist our manufacturing companies from distressed syndrome currently facing them and it will make them wax stronger in a global competitive environment.

Conclusion

In conclusion, MKIS is a very important means for effective decision making, sales growth and customer satisfaction. Most of the Nigerian manufacturing companies have to develop their marketing information applications in place to support online transactions. The Nigerian manufacturing sector managers' attitudes toward the importance of MKIS applications in business organisations are positive. This can help in improving the situation in the future.

Recommendations

Based on the conclusion, the study recommends that Nigeria manufacturing companies must work to make the marketing information system unit, administratively and financially separate and independent from marketing department, and give it a prominent place in the organizational structure, to be able to perform its functions without associating with the marketing management or other administrations in the company. Also management of Nigerian manufacturing companies must increase their interests in marketing information system through the provision of all essential supplies, and the introduction of modern methods and techniques in data processing, which increase the speed of rational decision-making.

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