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EVALUATING THE IMPACT OF MANAGEMENT INFORMATION SYSTEMS ON ORGANIZATIONAL PERFORMANCE: A CASE OF SEVEN-UP BOTTLING COMPANY

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Abstract: The objective of this study was to examine the influence of empathy on Customer patronage of Microfinance banks in Akwa Ibom State. To achieve this objective, the main source of data was through primary sources with the use of a questionnaire. The researcher adopted the survey research design approach and data were collected from 323 respondents drawn from the banks customers' base. A total number of 295 copies of the questionnaire were retrieved in useable form representing 91.3 percent of data analyzed using the Simple Regression Model (SRM). Data generated from the study were processed using descriptive and inferential statistics and hypothesis tested at 0.05 level of significance. Findings revealed that t empathy had significant influence on customer patronage of Microfinance banks in Akwa Ibom State. Thus, the study recommended that the managers of Microfinance banks should retain employees who can deal with the banks customers in a caring fashion, understand their needs and also have their best interest at heart.

Keywords: Influence of Empathy, Quality services, customer patronage, Micro-finance, Bank

Introduction

Business managers today, are much more concerned about the effect of competition than they were even a few years ago. They must react to the competitive threats not only from local source but also from regional, national and international source; likewise they must seek to explore all opportunities that are available in the immediate, national and Global environment (Munirat, Mohammed and Kazeem, 2014).

Deregulation has also increased competitive pressure for organizations to survive, grow and prosper. In such a competitive environment, managers must employ a lot of the resources at their disposal as efficiently as possible so as to accomplish the objectives and goals of the enterprise. Management Information System provides information in form of reports and displays to managers and many business professionals. For example sales managers may use their networked computer and web browser to get instantaneous display about the sales results of their daily sales analysis report to evaluate sales made by each sales personnel Management Information System also takes into account integrative nature of information flow as well as the structuring of the organization around decision centers. Standards of performance are part of any good plans; hence, determination of standards like other aspects of the planning process depends on the availability of relevant management information system. Management information system aids the functioning and monitoring of an organization. It also describes the components and resources to ensure the proper functioning of an organization (Munirat, Mohammed and Kazeem, 2014).

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This research is on Information Systems and Organizational performs which is based on examining the relationship between information system and organizational performance, how to tackle factors affecting organizational performance, in order to attain set goals and objectives, how organizations can breakeven, grow, mature and survive in order to satisfy customers effectively and efficiently, and how to use quality information in making strategic decision so as to be able to remain ahead of your competitors in the global market.

Organizational performance partly depends on the information systems in order to offer services with greater satisfaction to customers, accessing a wider range of valuable information, handling business changes at greater speed, and increasing the productivity of workers effectively and efficiently. According to Hooper & Page (1997) “information system is the sum of all the tools, techniques and procedures used by business to process data”.

Fisher & Kenny (2000) “suggested that organizations infuse information systems into their operations so as to enhance competitiveness and facilitate growth and success”. It is important to note that, for every organization that function and performs very well, there must be timely, relevant, accurate, pertinent and unambiguous information behind it. The essence of information is to retrieve and access data and facts that will be used in running the day-today activities of a business organization and to enable managers make effective decision. For instance, quality information enables the sales manager decide which of the salesman that will be rewarded at the end of the year for doing exceptionally well.

Moreover, organizational performance relies on information systems like: “Management Information System (MIS), Decision Support System (DSS), and Transaction Processing System (TPS) in order to remain afloat in the global market”. Information is the life-wire of any organization; any organization without quality information is bound to fail in the competitive market. “Therefore, for any organization to perform very well in order to achieve set objectives, the organization must have adequate information systems in order to know what your competitors are doing”, for you to plan ahead of them so as to outsmart them, to know your target market (customers) and how to satisfy them, when all these are achieved through the help of an information system, then the business organization can stand the test of time and performance will be achieved effectively and efficiently”.Delone & Mclean (1992) in their research titled “Information System Success Revisited” was based on theoretical and empirical IS research conducted by a number of researchers in the 1970s and 1980s, the purpose of the paper was to revisit, reexamine, and reformulate the IS (Information System) success model and IS measurement practices. In the work of Mojisola *et al.,*(2008) the effect of information system on firm performance and profitability using a case study approach”. The purpose of the work is to investigate the information system of Beale and Cole, to examine the course of action taken to implement changes to the existing IS practices and to share experiences and lessons learnt from the change process and the effect on the organization’s performance. This study therefore seeks to examine the relationship management information system and organizational performance of Seven Up Company in Aba and Port Harcourt. It also seeks to provide answers to the following research questions:

i. What is the relationship between management information system and increased profitability and conscientiousness in of Seven Up Company in Aba and Port Harcourt?

ii. What is the relationship between management information system and increased profitability and conscientiousness in of Seven Up Company in Aba and Port

Harcourt?

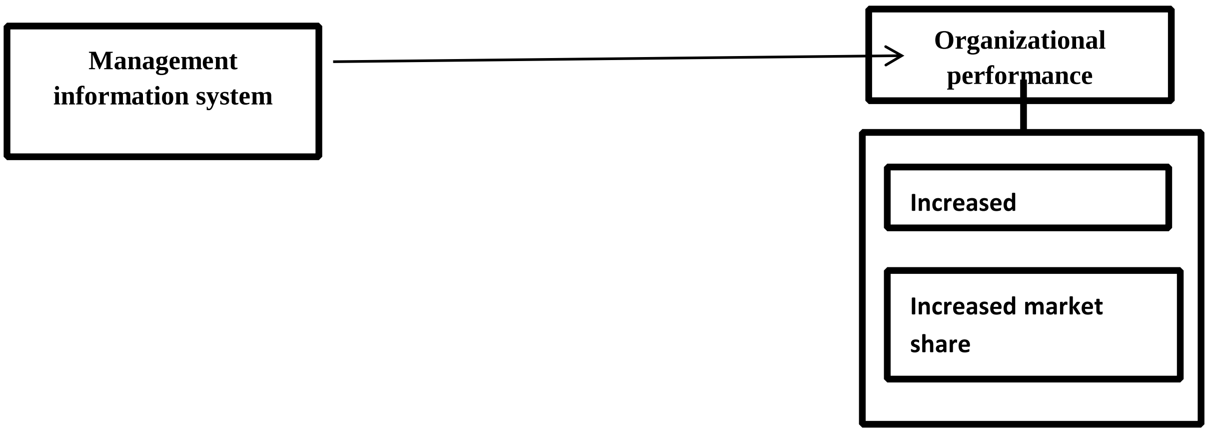

Fig. 1 Conceptual Framework for the hypothesized relationship between management information system and organizational performance ***Source: Author's Desk Research, 2017***

Literature Review

Management Information System

According to (Lucey, 2005) "MIS is a system that convert data from internal and external sources into information and communicates that information in an appropriate form to managers at all levels in all functions to enable them make timely and effective decision for planning, directing and controlling the activities for which they are responsible." The concept MIS has evolved over a period of time, comprising of many different facets of the organizational function (Gabriel, 2012). It can also be seen as an "organized method of collecting data, and processing them into meaningful information, storing, retrieving and disseminating to management for effective and efficient decision making."

Parson (2012) defined MIS as "an information system that uses data collected by transaction processing system and manipulates such data into reports for managers for making routine business decisions in response to structured problems". That is, "MIS is characterized by the production of periodic reports that managers use for structured and routine tasks". "One of the major goals of an MIS is to increase the efficiency of managerial activity; different levels of management have different needs and MIS can produce scheduled reports or ad hoc reports".

The term management information systems, popularly abbreviated as MIS according to Lucey (2005) has become synonymous with computer; yet, both concepts are not exactly the same because management information systems existed in the life of pre-modern organizations long before the advent of the computer technology. This argument is substantiated by the fact that computer was not in use when organizations kept records using traditional and manual mechanisms to manage information. It is important though to pinpoint that the computer takes credit for increased interest in management information systems because it eases and facilitates data processing as well as adds new vistas of interesting career options in MIS (Ottih, 2005).

With faster access to needed information through MIS, managers are able to make effective and timely decisions regarding investments, employment, new products and many more as it concerns their organizations. By decision -making, we refer to the process of choosing certain lines of action from among numerous alternatives. Decisions are basically an integral chunk of management and it occurs in every level (for example top management, middle management and lower management) and in every function (marketing, accounting, human resources, and production) (Lucey, 2005).

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As a key consideration, Management Information Systems is a highly complex and delicate arena that calls for a lot of caution to be taken by its managers. It is for this reason that it is recommendable for organizations to ensure that they carefully select the individuals who are placed to control the systems. The more cautious and professional a person is, the better the person gets an assurance of positive prospects of a MIS with regards to decision making and other related areas of business (Lingham, 2006).

Management information systems are very elemental improving company securities (Davenport & Short, 2008). For example, in many instances, most management information systems can be easily programmed by the owner to conduct certain actions at certain times. In effect, managers can program the system to perform certain routine checks which can help in improving efficiency of a company through easy discovery of bugs or problems. Furthermore, the programmability of most MIS saves a lot of priceless time and resources for owners. In other words, through programmability, business managers can program the systems to automatically discover certain deficiencies and even solve them.

Organizational Performance

In the early 50's organization performance was defined as the extent to which organizations viewed as social systems achieved their objectives (McNamara 2010). Later between 1960 and 1970 organizations had begun to discover new ways to assess their performance, as a result organizational performance was defined as an organizational ability to exploit its environment for gain access to and use the limited resources (Yuchtsman & Seashore, 1967). In between 1980 and 1990 there was a understanding that identification of organizational objectives was a more complicated process than what was considered at first, Directors started to comprehend that an organization is just prosperous if it successfully achieves its objectives using least resources (effectiveness). Along these lines, the consequent organizational hypotheses held to the possibility of an organization that accomplishes its performance purposes in spite of the imperatives forced by restricted resources (Lushes & Adrian, 1998). In this viewpoint, benefit has been one of the numerous measures of performance.

Institutional performance is an arrangement of financials and non-financial related pointers which give understanding with regards to the level of accomplishment of objectives and results (Lawrimore & Noble, 2009). There are two main measures of firm performance. The first one is financial whereas the second one is non-financial. Financial performance is a measure concerned with the firm's overall financial wellbeing over a predetermined time period. Financial measures include the ratios, the firm's profitability and the overall health of the balance sheet. The other measure of organizational performance is non- financial (qualitative). Put in another way, these are intangible measures. Pearson and Robinson (2002) contend that the earlier measures of financial performance, give insufficient or in some cases, an erroneous perspective of the status of the business and its capability to keep growing. They further argue that a company should persistently try to find ways to grow and enhance its qualitative measures. Some of the measures of non-financial performance include customer base, branch network, employees, customer satisfaction and customer base. Kaplan and Norton (2008) agree with the view that quality improvement must be a process unto infinity. Performance is the goal of every organization. It refers to the end result of activities while strategic planning aims to improve these results.

Measures of Corporate Performance

Different measures of corporate performance triumph. The once nominated were a function of the type of corporate performance that is under investigation. For this study, the measures are: profitability and market share.

Increased Profitability

Profitability refers to money that a firm can produce with the resources it has. The goal of most organization is profit maximization (Niresh & Velnampy, 2014). Profitability involves the capacity to make benefits from all the business operations of an organization, firm or company (Muya & Gathogo, 2016). Profit usually acts as the entrepreneur's reward for his/her investment. As a matter of fact, profit is the main motivator of an entrepreneur for doing business. Profit is also used as an index for performance measuring of a business (Ogbadu, 2009). Profit is the difference between revenue received from sales and total costs which includes material costs, labor and so on (Stierwald, 2010). Profitability can be expressed either accounting profits or economic profits and it is the main goal of a business venture (Anene, 2014). Profitability portrays the efficiency of the management in converting the firm's resources to profits (Muya & Gathogo, 2016). Thus, firms are likely to gain a lot of benefits related increased profitability (Niresh & Velnampy, 2014). One important precondition for any long-term survival and success of a firm is profitability. It is profitability that attracts investors and the business is likely to survive for a long period of time (Farah & Nina, 2016). Many firms strive to improve their profitability and they do spend countless hours on meetings trying to come up with a way of reducing operating costs as well as on how to increase their sales (Schreibfeder, 2006).

Increased Market Share

Market share refers to the percentage of sales a company has in a specific market within a specific time period. Higher market share translates into higher profits. Gaining or building market share is an offensive or attack strategy to improve the company's standing in the market (Sarkissian & Schill, 2010). Market share is a measure of the consumers' preference for a product over other similar products. A higher market share usually means greater sales, lesser effort to sell more and a strong barrier to entry for other competitors. A higher market share also means that if the market expands the leader gains more than the others. By the same token, a market leader - as defined by its market share - also has to expand the market, for its own growth (Schnaars, 1998).

There are many different ways to increase market share; companies usually use a combination of strategies. Sometimes something as basic as increasing advertising can have huge effects, as can adjusting pricing. Breaking products into groups and targeting them at specific demographics can also increase this percentage, as can making of complementary products. Another strategy is improving the product or service itself, which can attract customers from competitors, though this can be difficult, so many companies try to grow along with a growing market rather than trying to take business from the competition (Sliden,
2014 cited in Ong'ong'a, 2005).

Market share is a key indicator of market competitiveness; how well a firm is doing against its competitors. This metric, supplemented by changes in sales revenue, helps managers evaluate both primary and selective demand in their market. It enables them to judge not only total market growth or decline but also trends in customers' selections among competitors. Generally, sales growth resulting from primary demand (total market growth) is less costly and more profitable than that achieved by capturing share from competitors. Conversely, losses in market share can signal serious long-term problems that require strategic adjustments. Firms with market shares below a certain level may not be viable. Similarly, within a firm's product line, market share trends for individual products are considered early indicators of future opportunities or problems (Armstrong and Greene, 2007).

Management Information System and Organizational Performance

Organizational performance has received a great boost as a result of Information System (IS). Basically information system handles the flow and maintenance of information about significant people, places and things within the business environment/organization" (Jackson, 1997). It is important to note that effective organizational performance partly depends on IS to enhance production, effective decision making, and strategic planning. Further, "it has been claimed that to be competitive in today's high-tech environment world, organizations need to offer specialized services and develop an innovative strategy that employs new technologies, especially IS" (Williams, 2005). These technologies allow organizations to recognize the beneficial impacts of IS as an enabler of high standard performance. "High quality performance, efficiency and effectiveness represent critical challenges that most modern organizations face". In the light of these challenges, "IS becomes an important strategic ingredient that helps create competitive advantage and supports organizational survival" (Kaplan, 1992). On the other hand, organizations are required to adopt new technological devices and tools that support them in obtaining more benefits especially in the economic orientations which have become one of the most critical technologies and have claimed that IS constitutes more than 70% of the invested capital in the service industry (Mathis, 2006). Therefore, the rapid growth of IS and the associated reflections on organizations, market and industries, have created a widely held belief that IS (Information System) is fundamental to organizational survival and development (Ahed & Louis, 2008). Researchers are still struggling to identify the underlying link between information system and organizational performance. "Research has indicated that effective and efficient use of information system is a major factor differentiating successful organizations from their less successful equivalents" (Robert, 2006). Furthermore, challenges such as reducing cost, increasing efficiency and improving performance have led organizations today to implement new organizing mechanisms to improve performance which include IS. Thus, IS represents a practical response from organizations to overcome these challenges (Akata, 2003). From this practical viewpoint, the importance of IS to organizations is very dear, especially when it affects organizational process, mechanisms, and the ways the organizations functions. Thus, "this dynamic mechanism pressures organizations to become digital so as to better respond to the external environments more rapidly than traditional organizations, giving them more flexibility for survival in the turbulent environment.

The foregoing argument gave rise to the following hypotheses:

Ho_1: There is no significant relationship between management information system and increased profitability in Seven Up Company in Aba and Port Harcourt.

Ho_2: There is no significant relationship between management information system and increased market share in Seven Up Company in Aba and Port Harcourt.

Methodology

The study used a cross sectional .The population of the study was 156 and a sample size of 117 was obtained through the Taro Yamane formula for sample size determination with the simple random technique used. After data cleaning, only data of 107 respondents were finally used for data analysis. The internal reliability of the instrument was ascertained through the Crombach Alpha coefficient with all the items scoring above 0.70 bench mark set by Nunnally (1970). Descriptive statistics and Spearman's rank correlation were used for data analysis and hypothesis testing with the aid of the SPSS Package version 21.

Results and Discussions

Bivariate Analysis

The secondary data analysis was carried out using the Spearman rank order correlation tool at a 95% confidence interval. Specifically, the tests cover hypotheses Ho_1 to Ho_3 which were bivariate and all stated in the null form. We have relied on the Spearman Rank (*rho)* statistic to undertake the analysis. The 0.05 significance level is adopted as criterion for the probability of either accepting the null hypotheses at ($p>0.05$) or rejecting the null hypotheses at ($p<0.05$).

Test of Hypotheses

Presentation of results on the relationship between Management information system and Organizational performance

			MIS	Profitability	Market Share
Spearman's rho	MIS	Correlation Coefficient	1.000	.719**	.798**
		Sig. (2-tailed)	.	.000	.000
		N	107	107	107
	Profitability	Correlation Coefficient	.719**	1.000	.627**
		Sig. (2-tailed)	.000	.	.000
		N	107	107	107
	Market share	Correlation Coefficient	.798**	.627**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	107	107	107

Source: SPSS 21.0 data Output, 2017

Ho_1: *There is no significant relationship between management information system and increased profitability in Seven Up Company in Aba and Port Harcourt.*

From the result in the table above, the correlation coefficient (rho) shows that there is a significant and positive relationship between management information system and increased profitability. The *rho* value 0.719 confirms the magnitude and strength of this relationship and it is significant at p $0.000<0.01$. The correlation coefficient represents a high correlation indicating a strong relationship between the variables. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between management information system and increased profitability in Seven Up Company in Aba and Port Harcourt.

Ho_2: *There is no significant relationship between management information system and increased market share in Seven Up Company in Aba and Port Harcourt.*

From the result in the table above, the correlation coefficient (rho) shows that there is a significant and positive relationship between management information system and increased market share. The *rho* value 0.798 confirms the magnitude and strength of this relationship and it is significant at p $0.000<0.01$. The correlation coefficient represents a high correlation indicating a strong relationship between the variables. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between management information system and increased market share *in* Seven Up Company in Aba and Port Harcourt.

Discussion of Findings

The test of hypotheses shows that there is a strong positive relationship between management information system and each of the measures of organizational performance in Seven Up Company Aba and Port Harcourt. This finding implies that when an organization is MISoriented in their day to day activities, it will be faster and easier for them to retrieve information and such information could be utilized for organizational performance to be more successful. Mathis (2006) noted that to determine a set of competitors, it requires knowledge of which customers might be using this product and for what purpose. This finding reinforces previous research of Rananathan and Kannabira (2012) in which it was discovered that the main objective of information systems is to improve and enhance the potential role of the organization in terms of improving its overall financial performance. Jules, Goddard (1985) "agreed that the main benefit of TSR is that it allows the performance of shares to be compared even though some of the shares maybe have a high growth and low dividend and others may have low growth and high dividends".

Conclusion and Recommendations

Information system collects data, organizes people, procedures, databases and devices used to provide routine information that will assist managers in making effective and efficient decisions that will improve both individual and organizational performances, plays a vital role in realizing the objectives of an organization. It helps in ensuring that actual organizational performance conforms to the expected performance objective of the organization through the provision of accurate and necessary information needed for effective decision making that will lead to the achievement of organizational objectives.

This study therefore concludes that management information system significantly influences the organizational performance of Seven Up Company in Aba and Port Harcourt through increased profitability and market share.

Based on the foregoing conclusion, the following, recommendations were hereby made:

- **i.** Management should ensure that organizational performance is sustained through regular evaluation of her management information system.
- **ii.** Management should also ensure that other organizational success factors are evaluated to compliment the contributions of the MIS to the success of the organization.

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