

Management Information Systems (MIS) and Organizational Performance of Selected Production Companies in Southern Nigeria

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Abstract: *The paper examined the relationship between management information system and organizational performance of selected production companies in South-South, Nigeria. The objective of the study was to empirically examine how management information system relates with organizational performance in terms of market expansion, product innovation and customer satisfaction of selected production companies in South-South, Nigeria. Explanatory cross-sectional survey research design was utilized in the study. The population of the study consisted of one hundred and eighty (180) managers from 36 Selected Production Companies in South-South, Nigeria. Five managers (General Managers, ICT Managers, Operations Managers, Sales Managers, and Customer Relations Manager) were chosen from each of the companies. Using census sampling technique, the sample size of the study was one hundred and eighty (180) managers from 36 Selected Production Companies in South-South, Nigeria. Out of 180 copies of the validated questionnaire that were administered, the researcher was able to retrieve 167. The data obtained from the field were analyzed using Spearman's Rank Order Correlation Coefficient and t-test with the aid of SPSS Version 22.0. Three hypotheses were tested using Spearman Rank Order Correlation. Based on the empirical analysis carried out, the study revealed that: management information system has a strong positive relationship with market expansion of selected production companies in South-South, Nigeria; management information system has a strong positive relationship with product innovation of selected production companies in South-South, Nigeria, and; management information system has a strong positive relationship with customer satisfaction of selected production companies in South-South, Nigeria. The study concluded that management information system significantly enhances organizational performance of organizations (especially production companies) through increased product innovation, customer satisfaction, and market expansion. Among others, the study recommended that production companies should train their specialized personnel who will competently handle their management information systems so as to favourably compete with their counterparts in terms of market expansion, product innovation customer satisfaction.*

Keywords: Management Information System, Organizational Performance, Market Expansion, Product Innovation, and Customer Satisfaction.

Background of Study

The means of communication and the transmission of information have evolved in tandem with the rapid speed of technological advancements in production. Because of this, increasingly competitive organizations have been compelled to make swift decisions that positively impact the efficacy of their performance (Belkur *et al.*, 2017). In order to improve their performance, particularly in the areas of product innovation, customer happiness, and market development, organizations today require tools. These tools should help them make quick, automated decisions to improve the organization. Along with methods to lessen the uncertainty, only a robust management information system (MIS) can ease these difficulties (Obara, 2013). An integrated user-machine system that provides information to assist an organization's operations, management, and decision-making activities is known as a management information system (MIS) (Okunade, 2016). The human resource management system, management reporting system, sales, and marketing system, are examples of MIS manifestations. Although not experimentally supported, these instruments are believed to be crucial to a production company's performance.

An organization's capacity to utilize various organizational resources to accomplish its goals and objectives is referred to as organizational performance (Sangiorgi & Siboni, 2017). Researchers concur that a performance measurement system is essential for businesses because it gives data on the effectiveness of internal operations, aids in creating strategic plans, and assesses the

accomplishment of organizational goals (Alrowwad *et al.*, 2017). However, this study measures organizational performance regarding customer satisfaction, product innovation, and market expansion.

Product innovation improves an organization's manufacturing environment (Sanket, 2017). Here, the entire production system, including the procedures and techniques used to turn raw materials, semi-finished products, and subassemblies into goods or services, is enhanced for the organization's advantage under its planned aim and achievement. Customer satisfaction means that the customer's evaluation of the product after purchasing is in tandem with his/her expectation (Peeter *et al.*, 2016). Satisfaction concerns the customer's judgment of whether the goods and services meet expectations and needs and provide a satisfactory level of consumption-related fulfillment. Market expansion requires tactics designed to capture a larger market share, even at the price of immediate profits (Storbacka, Tangus & Omar, 2017). Decisions on the considerable number and variety of market expansion strategies are taken at several organizational levels, from the strategic to the operational and service encounter levels, to strategize and offer a service. The corporate market expansion strategies that aim to increase sales, assets, and profits are the most popular.

While the study assumes that adopting management information systems will improve the organizational performance of production companies, it is yet to gain empirical evidence. The study, therefore, aims at empirically establishing a relationship between management information systems and organization performance (market expansion, product innovation, and customer satisfaction) of selected production companies in South-South, Nigeria.

Aim and Objectives of the Study

The study aimed to ascertain the relationship between management information systems and the organizational performance of selected production companies in South-South, Nigeria. The specific objectives of the study include the following:

1. To determine the relationship between management information systems and market expansion of selected production companies in South-South, Nigeria.
2. To determine the relationship between management information systems and product innovation of selected production companies in South-South, Nigeria.
3. To determine the relationship between management information systems and customer satisfaction of selected production companies in South-South, Nigeria.

Research Hypotheses

The researcher tested the following null hypotheses at a 0.05 level of significance:

- Ho₁: Management information system has no significant relationship with the market expansion of selected production companies in South-South, Nigeria.
- Ho₂: Management information system has no significant relationship with product innovation of selected production companies in South-South, Nigeria.
- Ho₃: Management information system has no significant relationship with customer satisfaction of selected production companies in South-South, Nigeria.

Theoretical Framework

This study is hinged on the Resource-Based View (RBV) Theory. Barney Jay propounded this theory in 1991. The theory sees resources as key to superior firm performance. According to Barney (1991), if a resource exhibits value, rarity, imitability, and organization (VRIO) attributes, the resource enables the firm to gain and sustain a competitive advantage. The theory assumes that resources must be:

- i. **Heterogeneous**: The first assumption is that organizational skills, capabilities, and other resources differ from company to company. If organizations had the same amount and mix of resources, they could not employ different strategies to outcompete each other. What one company would do, the other could follow, and no competitive advantage could be achieved. This is the perfect competition scenario, yet real-world markets are far from perfectly competitive. Some companies, exposed to the same external and competitive forces (same external conditions), can implement different strategies and outperform each other. Therefore, RBV assumes that companies achieve a competitive advantage by using their different bundles of resources (Rothaermel, 2012).
- ii. **Immobile**: The second assumption of RBV is that resources are not mobile and do not move from company to company, at least in the short run. Due to this immobility, companies cannot replicate rivals' resources and implement the same

strategies. In addition, intangible resources, such as brand equity, processes, knowledge, or intellectual property, are usually immobile (Rothaermel, 2012).

The Implication of Resource-Based View Theory to the Study

It is interesting to notice that organizations' skills, capacities, and other resources vary from firm to company. Firms aspire to have a competitive advantage and to remain at the forefront of growth and development. Therefore, they must significantly improve their market expansion, customer happiness, and product innovation to achieve these feats because these factors will mobilize other resources to create organizational actualizations across organizations. This would be possible if management adopted a modern management information system, such as a sales and marketing system, human resource management system, or management reporting system that would enable bang activities to be carried out both on and offline platforms for simple reporting and improved decision making for the improvement of its performance, thus keeping the organization afloat on success. Because businesses want to outperform their competitors, they must embrace advanced MIS platforms and tools to manage people effectively and efficiently while achieving their predefined goals and objectives. In addition, a firm's flood of external and competitive forces (technology inventions) is demanding of senior management. Therefore, they will gain insight on how to balance the effectiveness of their organization's management information system.

Software MIS applications that are judged appropriate for a given business must be incorporated into the system to balance the organization's performance through successful product innovation, customer happiness, and market expansion (Rothaermel, 2012). Last but not least, the immobility of resources enables upper management to create an atmosphere that supports MIS while enhancing organizational performance. Processes, knowledge, brand equity, and intellectual property are examples of intangible resources that are typically immovable. There are both human and non-human resources here. The effective use of contemporary MIS software tools (such as the Human Resource Management System, Management Reporting System, and Sales and Marketing System) to foster customer satisfaction with products and services is essential for firms to prosper in terms of performance.

Concept of Management Information System

Over time, the idea of a management information system has expanded to include various organizational functions. Every firm needs a management information system (MIS). The original idea behind MIS was to process the data already present in the company and periodically provide it in the form of reports. The system from collection might handle the data to processing in a significant part. It was more impersonal since each person had to select the processed data that suited his needs and use it. This idea underwent additional modification when the difference between data and information was established.

An integrated user-machine system that provides information to assist an organization's operations, management, and decision-making activities is known as a management information system (MIS) (Okunade, 2016). The system uses human processes, computer hardware, software, analytical models. Similar to how land, labor, and capital are seen as resources, information is also. It must be gathered, handled, stored, changed, analyzed, and disseminated. A company with a clearly defined management information system will typically have the edge over one without one or with a subpar MIS. Utilizing MIS is a methodical way to provide past, present, and projected data about internal operations and external intelligence (Okunade, 2016). Providing consistent information within the appropriate time frame to aid in the decision-making process supports an organization's planning, control, and operational functions.

MIS software tools aid businesses in gaining a competitive edge. Managers can make better decisions about sales, manufacturing, resource allocation, hiring people, and other issues by using the data controlled by an MIS system. In order to make the best decisions for the organization, the MIS process primarily entails data storage and report generation. In addition, a decision-supporting piece of software may be part of the MIS system. The software maintains an accurate record of the historical and current data in the necessary format, making it available for analysis anytime it is required (Comodo, 2018). The program is helpful in keeping a complete record of the hardware resources, project management tools, people management systems, and decision support systems, in addition to database maintenance and decision-making. Overall, it acts as the foundation of an organization, ensuring its smooth and effective operation.

To conclude, MIS aids in obtaining insightful insights that assist companies in remaining competitive and making well-thought-out business decisions. MIS gives management information by combining data from diverse software sources, compiling it, and clearly displaying it. As a result, managers may receive complete information, enabling them to conduct in-depth assessments of operational

problems and make well-informed decisions. Abdul (2018) claims that MIS includes systems that enable managers to decide on the efficient running of a business. Management information systems include software that aids decision-making, data sources such as databases, a system's hardware resources, decision support systems, project and people management applications, and any computerised processes that facilitate the efficient gathering of reports or information (MIS).

Concept of Organizational Performance

The total of all departments' successes measures an organization's performance. The accomplishments in each stage are outlined by the company goals that have been defined for a specific time. Business growth, progress, and survival are all related to the concept of performance in business (Ahmed & Shafiq, 2016). Customer, financial, market, and human factors are the four components that make up the complex construct known as organizational performance. Customer satisfaction, customer loyalty, financial performance (revenue, profits, market position, cash-to-cash cycle time, and earnings per share), management-employee organizational effectiveness, and other factors have historically been considered to be indicators of business performance (task accomplishment, quality output, productivity, time to market, level of innovation, management competency, companionship, management utility function). Many firms have restructured, established complete quality management programs, and added competitive worker perks to reach the required level of organizational performance. Zheng and McLean (2015) state that evaluations of several firms' sustained better commercial performance have ascribed that achievement to the unique cultures of the various organizations.

The organization's performance is a crucial concern for for-profit and nonprofit organizations. Additionally, business performance is the most crucial factor in evaluating businesses, their actions, and their environments (Shadi *et al.*, 2018). Increasing company performance is a requirement for strategic management of the organization that wants maximum performance (Cania, 2014). Performance is a broad concept encompassing all activities in organizations of all shapes and sizes. The definition of organizational performance includes the following factors: the standard of work produced, the effectiveness of the staff in making decisions, the improvement and development of processes, the relationship between the staff and their leaders, the variety of services and products, innovations, market share, the staff's skills and experience in problem-solving, and new methods and contemporary techniques of product development (Imran, 2017). Organizational performance is the extent to which an organization satisfies both its own and the needs of stakeholders in order to continue existing and expanding. An organization's capacity to utilize various organizational resources to accomplish its goals and objectives is called organizational performance (Sangiorgi & Siboni, 2017). Researchers concur that a performance measurement system is essential for businesses because it gives data on the effectiveness of internal operations, aids in creating strategic plans, and assesses the accomplishment of organizational goals (Alrowwad *et al.*, 2017).

Authorities in many sectors of endeavor are concerned with organizational performance, which also affects strategic planners, operations, finance, legal, and organizational development. Additionally, it is the psychotherapy of a company's output as determined by its objectives and purposes. Financial performance, shareholder value performance (and, in some cases, production capacity performance), and market performance are the three primary results that are calculated inside the company group. Operational conditions and organizational work performance are related to business performance. Here, "work performance" refers to how management and staff carry out their duties concerning the technology environment and the adoption of technical tools to run the company profitably. However, this work examines market expansion, product innovation, and customer satisfaction as organizational performance measures.

Measures of Organizational Performance

Market Expansion: Market expansion requires tactics designed to capture a larger market share, even at the price of immediate profits (Storbacka, in Tanguis & Omar, 2017). Decisions on the considerable number and variety of market expansion strategies are taken at several organizational levels, from the strategic to the operational and service encounter levels, to strategize and offer a service. The corporate market expansion strategies that aim to increase sales, assets, and profits are the most popular. Businesses operating in developing industries must expand if they want to thrive. Increased sales and the opportunity to utilize the experience curve to lower the cost of goods sold are two benefits of further growth (Tanguis and Omar, 2017).

Companies examining potential markets must evaluate their strengths and resources. These could be new and old products that have an unmet market. How will they come into contact with these prospective clients? First, companies need to think about their potential new clients. Once engaged, they can communicate a customized brand message to them. Organizations must finance initiatives. They must also be willing to take the chance of financial setbacks. Even the most sophisticated market expansion plans cannot ensure success. However, success will boost those businesses' financial prospects by boosting sales.

Obviously, among other things, Team (2018) stated the following are three ways through which an organization can grow its market expansion:

- i. Existing Markets: The ultimate low-investment/high-reward strategies may leverage an organization's current products and clientele to generate more sales. This works particularly effectively if the company has a client that only hires it for one or two part numbers but would like to purchase more from them.
- ii. New Verticals: Expanding into new sectors of the economy and vertical markets can help a company's current product line serve two purposes (or more). There is no need for new machinery or lengthy design cycles because more efficiency from the organization's current operations is needed.
- iii. New Geographies: The effectiveness of an internet content marketing plan can virtually limitlessly broaden an organization's geographic reach. A solid digital strategy will tear down such barriers, whether the goal is to transition from a local to a regional supplier or from a national business to an international player. This geographic expansion is related to location.

Product Innovation: Product innovation continuously improves an organization's manufacturing environment (Sanket, 2017). Here, the entire production system, including the procedures and techniques used to turn raw materials, semi-finished products, and subassemblies into goods or services, is enhanced for the organization's advantage following its planned aim and achievement. In this situation, management ensures that the organization's production processes align with its vision, purpose, and goals. This is improved using cutting-edge tools, concepts, expertise, and time (Sanket, 2017).

Innovation and the creation of fresh ideas that use data, cutting-edge analytics, digital technologies, and new delivery platforms are more crucial than ever. Targeting, service expansion, reorganization of distribution channels, provision of proactive advice, payment integration, and blockchain technology application are all innovations organizations make. Pierre *et al.* (2017) stated five rules of product innovation:

- i. Deliver value for the customer: it is noteworthy that effectiveness comes before efficiency. This implies to start with a focus on creating value for the customer must not be trivialized. Quality is expected to be taken into cognizance as it is in conformance with customer requirements.
- ii. Get processes under control: Do not overload processes, equipment, or people. Queuing theory proves that chaos grows exponentially when utilization gets closer to 100 %. So if the key to the first principle is quality, the key to this principle is a deep respect for the organization's resources, first and foremost, respect for people.
- iii. Sync processes as a system: The third rule is to sync processes. It requires a system perspective. Management expects to know that variation is one of the biggest enemies of productivity; thus, it should be sought to be reduced (Hopp & Spearman, 2011).
- iv. Shorten throughput times: For productivity, fast flow is ideal (Schmenner, 2012). But not at the expense of any of the three first rules! An excellent way to shorten throughput times and lead times is to reduce non-value-adding activities in and between all processes, so-called waste.
- v. Continuously improve: There are two good reasons for seeking continuous improvement (Womack & Jones, 1996). First, because systems never get perfect, there is always room for increasing productivity in your processes. Second, the external environment is constantly changing.

Customer Satisfaction: Customer satisfaction, according to Peeter *et al.* (2016), is defined as the customer's assessment of the product after purchase in line with his or her expectations. Customers may be dissatisfied, satisfied, or delighted with the services the specific business provides. Customers who are happy with their purchases are crucial since they are more likely to be loyal and willing to recommend the product or service to others. People have been concentrating on product behavior in the same way a buyer with functions, features, and qualities did for the previous few decades. Customers these days frequently request additional advantageous features before committing to a purchase. One of the highly desired features is a pleasant atmosphere. Jacobson (2017) emphasized that if patrons experience slow or unfriendly treatment, they will leave and seek another business that provides quick, convenient, and superior services (Tlapan, 2015).

Customers' satisfaction is sacrosanct to organizational performance, so organizations work to increase the perceived quality of their services. In this regard, one can say that the most important fact is that the customer is at the center of attention. Additionally, a "performance gap" is a negative discrepancy between perceptions and expectations that results in dissatisfaction, whereas a positive discrepancy results in consumer satisfaction (Kumbhar, 2012). Customer satisfaction is a gauge of how well businesses perform concerning client requirements. This offers another way to gauge service quality. Customers can genuinely remark on items and

services by giving feedback on aspects of the service (Al-Jazzazi & Sultan, 2017; Slusarczyk, 2017). In the current market, businesses that do not offer high-quality goods and services risk losing clients to rivals (Cheng, 2013). Organizations must be customer-centered, provide superior customer value, cultivate connections, and concentrate on market engineering since customers are increasingly demanding and have higher expectations for quality. Today's organizations monitor their competitors and their performance, customer happiness, and expectations. As a result, the company has a significant impact on the economy. We can see the issues resulting from increased market rivalry due to technological advancements, shifting consumer needs, and governmental rules and policies. Organizations place a high priority on meeting client needs and closely monitoring their level of satisfaction. This tactic aids businesses in retaining clients for a longer time. The expense of acquiring new consumers is greater than keeping current ones.

Methodology

An explanatory cross-sectional survey research design was utilized in the study. The study population comprised one hundred and eighty (180) managers from 36 Selected Production Companies in South-South, Nigeria. Five managers (General Managers, ICT Managers, Operations Managers, Sales Managers, and Customer Relations Managers) were chosen from each company. The production firms above firms were chosen as the study population due to their accessibility and visibility to the researcher. Considering that the population was not too much for the researcher to handle, the entire population was utilized as the study's sample size, which implies using a census sampling technique. This implies that the study's sample size was one hundred and eighty (180) managers from 36 Selected Production Companies in South-South, Nigeria.

Regarding the primary data, a structured questionnaire was used, titled "Management Information System and Organizational Performance Index (MISOP). It was designed on a five-point Likert scale with the following response options: Very Great Extent (VGE) 5, Great Extent (GE) 4, Moderate Extent (ME) 3, Low Extent (LE) 2, and Not at All (NA) 1. The instrument was face and content validated by the researcher's supervisor and two research experts in the Management Department of Ignatius Ajuru University of Education, Port Harcourt, Rivers State. Cronbach's alpha via SPSS (Statistical Package for the Social Sciences) was used to ascertain the instrument's reliability. The most minor Cronbach's alpha level obtained was 0.77, which indicated a highly reliable coefficient. Based on Nunnally's (1978) criterion of 0.70, a reliability coefficient above 0.70 was considered to indicate good or reliable instruments. Out of one hundred and eighty (180) copies of the validated questionnaire that were administered, the researcher could retrieve one hundred and sixty-seven (167) copies. In handling the data analysis, hypotheses were tested using Spearman's Rank Order Correlation Coefficient via the Statistical Package for Social Sciences (SPSS) version 20.0. The Spearman's (rho) correlation was used to analyze the relationship between independent and dependent variables at $P < 0.05$ (two-tailed test). The formula is presented below:

$$r = 1 - \frac{6\sum d^2}{n(n^2 - 1)}$$

Where:

n = number of pairs of data

d = difference between the ranking in each data set.

\sum = Summation.

Decision Rule: The tests of hypotheses will be considered two-tailed and carried out at a 95% confidence interval.

Results/Findings

- Ho₁: Management information system has no significant relationship with the market expansion of selected production companies in South-South, Nigeria.
- Ho₂: Management information system has no significant relationship with product innovation of selected production companies in South-South, Nigeria.
- Ho₃: Management information system has no significant relationship with customer satisfaction of selected production companies in South-South, Nigeria.

Table 1: Correlation between Management Information Systems and Organizational Performance

	Management Information System	Market Expansion	Product Innovation	Customer Satisfaction
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Spearman's rho	Management Information System	Correlation Coefficient	1.000	0.727**	0.675**	0.709**
		Sig. (2-tailed)	.	.000	.000	.000
		N	167	167	167	167
	Market Expansion	Correlation Coefficient	0.727**	1.000	0.973**	0.812**
		Sig. (2-tailed)	.000	.	.000	.000
		N	167	167	167	167
	Product Innovation	Correlation Coefficient	0.675**	0.973**	1.000	0.782**
		Sig. (2-tailed)	.000	.000	.	.000
		N	167	167	167	167
	Customer Satisfaction	Correlation Coefficient	0.709**	0.812**	0.782**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	167	167	167	167

****.** Correlation is Significant at the 0.01 level (2-tailed).

Source: SPSS Output

Column two of the above table 1 shows an r-value of 0.727 at a significance level of 0.00, less than the chosen alpha level of 0.05 for the hypothesis relating to management information systems and market expansion. Since the significance value is less than the alpha level of 0.05, the null hypothesis (H_{01}), which states that the management information system has no significant relationship with the market expansion of selected production companies in South-South, Nigeria, was rejected. This implies that the management information system has a strong positive relationship with the market expansion of selected production companies in South-South, Nigeria.

Column three of the above table 1 shows an r-value of 0.675 at a significance level of 0.00, less than the chosen alpha level of 0.05 for the hypothesis relating to management information systems and product innovation. Since the significance value is less than the alpha level of 0.05, the null hypothesis (H_{02}), which states that the management information system has no significant relationship with product innovation of selected production companies in South-South, Nigeria, was rejected. This implies that the management information system has a strong positive relationship with product innovation of selected production companies in South-South, Nigeria.

Column four of the above table 1 shows an r-value of 0.709 at a significance level of 0.00, less than the chosen alpha level of 0.05 for the hypothesis relating to management information systems and customer satisfaction. Since the significance value is less than the alpha level of 0.05, the null hypothesis (H_{03}), which states that the management information system has no significant relationship with customer satisfaction of selected production companies in South-South, Nigeria, was rejected. This implies that the management information system has a strong positive relationship with customer satisfaction of selected production companies in South-South, Nigeria. These results revealed that the management information system has a significant positive relationship with the organizational performance of selected production companies in South-South, Nigeria.

Summary of Findings

From the above empirical analysis, the following findings were made:

1. Management information system has a strong positive relationship with the market expansion of selected production companies in South-South, Nigeria.
2. Management information system has a strong positive relationship with product innovation of selected production companies in South-South, Nigeria.
3. Management information system has a strong positive relationship with customer satisfaction of selected production companies in South-South, Nigeria.

Discussion of Findings

The hypotheses one to three tests revealed that the management information system has a significant positive relationship with the organizational performance of selected production companies in South-South, Nigeria in terms of market expansion, product innovation, and customer satisfaction. A business organization can use sales and marketing systems to help with marketing business processes (such as identifying customers for the firm's products or services, developing products and services to meet their needs, and promoting products and services) and sales processes (such as selling the products and services, taking orders, contacting customers, and providing customer support) (Goldman, 2020). Customers can submit legitimate suggestions for improving products and services through a management information system (MIS) like a sales and marketing system. Customers are also quickly attended to in a way that will encourage them to reach out to potential customers, thereby expanding the market for the organization. The use of sales and marketing systems refers to the utilization of any online platform that enables businesses to keep track of every aspect of their client connections across the sales funnel and to provide tools to enable sellers and marketers to forge stronger bonds with their customers (Waida, 2018). In addition to being more cost-effective, a combined sales and marketing tool serves as a central information hub for growth teams (a team of sellers and marketers working together to increase revenue). It does this by keeping all previous client data in one place that is both organized and searchable. This makes it incredibly simple for the business, through its growth teams, to contact its customer base with inquiries and complaints that would increase consumers' pleasure and build their base.

The management reporting system, also known as an MIS, is made to help the management team by giving timely, relevant information. Additionally, it aids in gathering data that managers require to run a successful company. Financial information, employee numbers, client accounts, product information, client assets in custody, and investment performance are all examples of data that may be available. The corporation may use all of these data to develop strategies to better compete with industry heavyweights by raising the quality of its goods and services, meeting customer needs, and attracting new clients. The management reporting system is a helpful instrument for helping an organization's management improve performance in market expansion and product and service innovation (Kumar, 2017). An efficient management reporting system enhances decision-making, efficiency, issue-response, and resource utilization in providing administrative services (Bhattacharyya, 2017). Such can benefit the organization both domestically and abroad.

The system also aids management in problem identification, alternative solution evaluation, best solution implementation, and execution review, enabling the firm to offer goods and services more effectively and grow and satisfy its client base. Data is stored in robust management reporting systems at far more granular levels than are shown to the investing public. In addition, various non-financial characteristics important to management are tracked using the tools, which helps management work successfully and efficiently.

The ways that firms manage their human resources (HR) have altered due to information technology advancements. A human resource management system (HRMS) is currently used by many businesses to help the HR department carry out important HR activities, increase administrative effectiveness, extend the market, enhance decision-making, speed up information exchange, and reach out to more clients (Lengnick-Hall & Moritz, 2017). At the same time, Chugh (2014) mentioned that one of the benefits of HRMS as a tool to achieve improved organizational performance by adding value to the human resources department is workload reduction by eliminating administrative activities. By providing HR managers with timely information about the company's human talent that will improve product innovation, customer satisfaction, and market expansion, HRMS enables HR managers to participate in strategic decision-making (Lengnick-Hall & Moritz, 2017). Additionally, HRMS offers strategic management data for integrating HRMS data into the overall business plan and employment and retention initiatives. The HRMS data collection gives managers a tool for making decisions. Businesses can make calculations that impact the company through effective HRM. These calculations may include the price of health insurance per employee, pay benefits as a percentage of operational expenditures, cost per hiring, return on training, attrition rates and costs, the time required to fill specific roles, return on human capital spent, and human value generated.

Conclusions

From the empirical analysis, the study concludes that management information system significantly enhances the organizational performance of organizations (especially production companies) through increased product innovation, customer satisfaction, and market expansion. Therefore, production companies that aim to compete favourably in the local and international market spaces, both online and offline, are encouraged to make use of human resource management systems, management reporting systems, and sales and marketing systems, as these will afford them sustainable customers that will stand the test of time. Amongst others, this will help ensure that actual organizational performance conforms to the organization's expected performance objective through

providing the accurate and necessary information needed for effective decision-making that will lead to the achievement of organizational objectives.

Recommendations

Based on the findings, the study recommends the following:

- i. Management of production companies should ensure that organizational performance is sustained through regular evaluation of their management information system.
- ii. Management should also ensure that other organizational success factors are evaluated to complement the contributions of the management information system to the organization's performance.
- iii. Production companies should train their specialized personnel who will competently handle their management information systems to compete favourably with their counterparts in terms of market expansion, product innovation customer satisfaction.

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