The Competency of Information System Management in an Organization for Better Decision-Making

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ABSTRACT
Information technology (IT) has dramatically increases information system management. In the same time, it also creates opportunities to organization thus information technology is also rising alongside information system management in an organization. It is important for an organization to own an information management system. Yet it is often ignored in providing a very good system or applications. Understanding information system management and its ability to provide inputs, processes, outputs and outcomes is essential to assist organization in decision making. Information system management has been a real concern within organization. By some, the competency of information management system may help in improving the performance of organisation. This paper aims to identify the competency information system management and how it can bring benefit to the organisation.

Keyword: information system management, organisation, ISM, Information, Competency

1. INTRODUCTION

Information System Management (ISM) is an electronic database of information organized. It also as a programmed in such a way that provide regular reports on operations for every level of management in an organization. Moreover, ISM potential to get special reports from the system easily. The main objective of the ISM is to give managers feedback about their organisation performance. Hence, top management in organization can monitor the company as a whole. Furthermore, information is very important that can displayed by the ISM usually shows actual data over against planned results and results from a year before. Accordingly, it measures progress against goals. Besides that, the ISM receives data from company units and functions. Likewise, computer linked checkout counters are collected automatically by some of the data in ISM. In addition, routine reports in organization are pre-programmed and run at intermissions or on demand. However, others are gained using built in query languages and display functions built into the system are used by managers and top management to check on status at desk side computers connected to the ISM by networks. In addition, many sophisticated systems responsible to frequently monitor and display the performance of the organisation process and operation

In a world where organization globalize and level the hierarchies, top management and managers should make more complex decisions and turn to better information encouragement in organisation process. Therefore, the ISM can assist lead organizational change projects in

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transforming and improving business processes and creating new, innovative digital products and services in organization. The competency of ISM deals with improving the performance of organizations and people through the use of information technology. Thus, ISM is designed combining technologies, discipline, processes, personnel and organizational mechanisms. Obviously, the success of ISM is measured in terms of individual and organizational performance. Nevertheless, organizing information technologies in organizations setting needs a wide range of competencies. Besides that, ISM desires to be skilled at acquiring the necessary technologies, building business relationships and making the organization for change. There are three main the competency of Information System Management in organization that we want to share in this academic writing which are managing general process and operations in organization, improve decision making of management and staff in organization and support strategies for competitive advantage in organization.

2. LITERATURE REVIEW

2.1 Defining Information Management System

Jamwal and Singh (2011) defined that Information Management System (ISM) is an information system that coordinates information from everyone in the organization it serves and gives operations and management the data they require. ISM competent to improve business framework for manager, give business information including budgetary, money related and program execution (Teo and King, 2013). Teo and King (2013) further added the ISM can replaces out to date, nonintegrated reporting and information frameworks in an organisations. Brooke and Maguire (2012) stated that ISM help firms acknowledge most extreme advantage from interest in work force and business processes. MIS is a people-oriented field with an accentuation on administration through innovation (Anderson, 2010). Edwards (2011) termed that ISM is to help an organisations deal with its business better. Gordon (2016) described that ISM comprehensively alludes to a computer based system that provides managers with the tools to arrange, assess and effectively oversee departments inside an organisations. Harry (2011) summarized that ISM can incorporate programming that helps in decision making, information assets, for example databases, the equipment assets of a system, people management, decision support systems and project management application and any automated procedures that empower the organization to run proficiently.

Figure 1: The Competency of Information System Management

2.2 Managing General Process and Operation in Organization

According to Lin (2013) identified that the competency of Information System Management (ISM) can provide needs of client by improving procedure and operation in organization. Wang (2016) understanding that ISM can give process and operations management in organization about applying business organization and management ideas in formation of goods and services. ISM can improve management business operations with proficient as far as utilizing as few resources as required and compelling as far as meeting client necessities (Hildebrand, 2014, as cited in Smith and Leidner, 2016). King (2010) researched further into the competency of ISM that can gives a few advantages to the business organization which are the methods for powerful and effective coordination between offices, speedy and dependable referencing, access to applicable information and archives, utilization of less work, change in authoritative operation and management of everyday routine.

Figure 2: Improve Management Process and Operation in Information System Management

ISM gives an important efficient advantage to the workforce (Orlikowski, 2012). Orlikowski (2012) further added workers do not need to gather information manually to file and investigation. Rather, that data can be entered rapidly and effortlessly into ISM (Orlikowski, 2012). Gallivan, Eynon and Rai (2013) stands to support highlighting by Orlikowski (2012) as the measure of raw information becomes too expansive for employees to investigate, business experts can assemble ISM to get to the information and data in light of inquiries by management. Gallivan, Eynon and Rai (2013) also concluded with speedier access to required information in ISM, managers can settle on better decisions about strategies, future bearings and improvements by competitors and make them all the more rapidly.

2.3 Decision Making for Management and Staff

Kiniti and Standing (2013) explained that whenever management and staff construct their decision with respect to information accessible from Information System Management (ISM) competency, it will reflect data that originates from the operations in organization. Leuf and Cunningham (2011) mentioned ISM either have slant analysis worked in or can provide data that gives management and staff a chance to complete such an analysis. Leuf and Cunningham (2011) further added a trend analysis from IMS enables management and staff to show what these outcomes would be in the present circumstance and how they will change once they have executed the choices their have taken. Stein and Blaschke (2008) also believed that while management settle on their decision because of particular objectives and have the documentation from ISM, management need to track organization outcomes to ensure they create as arranged.

Figure 3: Decision Making in Information System Management

Kaniti and Standing (2013) researched further that ISM give management the information their need to decide if their decision have had the coveted impact or whether there need to make restorative move to achieve their objectives. On the off chance that particular outcomes are not on track, management can utilize ISM to assess the circumstance and choose to take extra measures if fundamental (Kaniti and Standing, 2013). Smith and Leidner (2009)

noted that the ISM improves and accelerates information recovery by putting away information in a focal area that is available by means of a system. Smith and Leidner (2009) enlightened that ISM help decision makers understand the ramifications of their decision. Gallivan, Eynon and Rai (2013) explained that the systems crude information into reports in an arrangement that empowers decision makers to rapidly recognize examples and patterns that would not have been evident in the raw of information.

2.4 Support Strategies for Competitive Advantage

Lee et al. (2009) identified that the plan and strategies for development and its usage is a fundamental need for Information System Management (ISM) in organization. Saparito and Gopalakrishnan (2009) found that ISM is perceived as significant resource like capital and time. Saparito and Gopalakrishnan (2009) further added if the resource must be overseen well, it calls upon the management to anticipate it and control it, so that the information turns into an indispensable resource for the ISM. Un Jan and Contreras (2016) concerned that the ISM needs good in planning. Huang et al. (2009) analyzed that system ought to manage the management information not with information preparing alone. It ought to offer help for the decision making, management planning and activity (Huang et al., 2009).

Lockett et al. (2009) acknowledged that ISM ought to offer help to the changing needs of business management in organization. Lopez-Nicolas and Soto-Acosta (2010) identified that along range ISM plan gives competency direction to the improvement of the system and gives a basis to accomplishing the particular targets or undertakings against time period. Du Plessis (2008) suggested that it is important to build up the objective and goal for the ISM which will bolster the business objectives in organizations. Du Plessis (2008) further added the ISM objectives and goals will consider management logic, approach requirements, business hazard, internal and external condition of the organization and business. Kiniti and Standing (2013) explained that the objectives and goals of the ISM would be stated to the point that management can be measured.

As a concluding for Literature Review, Information Management System competency are required in organization to fabricate information system that must effectively meet the one of a kind prerequisites of a few business organization. The system is required to help a few business organizations in successfully utilizing the specialized arrangement. Organizations needs to build their interests in ISM essentially with the desire that these ventures will enhance organization performance.

3. DISCUSSION & RECOMMENDATIONS

ISM is important to organisation in any size. In fact, directly or indirectly nearly all around us are touched by ISM. Example of ISM are like generating electricity bills, generating bank statement, online shopping, withdrawing money from ATM and lots more. Today ISM is an essential fact of life and we can no longer survive without them as a society (Da Silveira & Cagliano, 2006). Although it may be difficult for us to see the value of ISM that we handle everyday but we need to get into the practice of using ISM competency in the same way as we look after our other business processes.

3.1 Managing General Process and Operation in Organization

Managing general process and operations in organization is important. As mentioned above, ISM able to provide needs of client by improving procedure and operation in organization. According to Alvarez (1999), this can be implemented by developing the business processes to fit and as accordingly with the ISM. And once it has been implemented, to what extend does the ISM able to work alongside the business process? It would be a waste and business problem could stay unresolved if ISM cannot work and aligned with organisation needs. Each organisation must evaluate and measure whether the developed ISM can bring value to them. Other than that, evaluation is important as to recognise does business understand what they need matches what the system does. To know what business need, the technical staff who implement the system must meet and discuss with people who involved in the business process. By this, business will have the keys feature on the application does. Business may seek some other vendors which may have brought or built similar application as this to help them in comparing alternatives. According to Alavrez (1999) by using ISM for managing general process and operation in organisation, it able to radically transforming the processes to achieve efficiencies on new or unachieved goals. Once we achieved the goals, it will benefit the staff and also add value to the customer. Putting it in a right sentence, by ISM we able to manage a large number of people and in the same time allow customers to do it by themselves. Organisation completely rethought the process by which how can customers buy their product. ISM is ideally suited for managing business process for instance there are few supermarket that let customer walk into the store and picks a product, then they will scan the product in the self-service to know the price and lastly pays using cash or credit card. As we can see, these intelligence systems able to be used widely in many kind of business process. Some business can even reduce their task or workforce. Other example could be where people walk into the bank branch to withdraw their own money using the ATM. There is no staff needed to entertain the customer.

Using ISM in organisation can actually support the organisation to redesign the business process. These are different example of business process that can be redesign using ISM such as online ticketing, electronic email, electronic trading, online stores, cashless payment, video conferencing, computer-based examinations and lots more. Recommended ISM business process implementation is starting from the documenting the current process which is how you do things currently (Kharub & Sharma, 2017). Next, measure the process by acquiring feedback from staff and customer. From feedback, we able to know the satisfaction and reactions. The third step is follow the process and make modifications or enhancement if required. Then measure the performance of the process and last but not least from the feedback gathered identify areas of improvement and implement changes. Once changes have been implemented, then go back to the second step and gradually keep transforming and changing the process.

3.2 Improve decision making for management and staff

Decision making is developing concepts leading to the selection of a course of action among variations thus every decision-making process produces final choice. Depending on the situation, it can be an action or an opinion which all usually begins with when we need to

something but we do not know what (Obioma Ejimabo, 2015). ISM tools developed for certain purpose of assimilating pertinent data and generating a detail analysis of a given situation to support variety of decision processes. An ISM must flexible so users can add, delete, combine, change or rearrange basic elements. If an ISM can be deployed as a stand-alone so that it can use by individual decision maker in one location or in distributed location. Example in online banking website, most people will just call it a website of a bank but in reality, it is indeed a personal finance website. Through this website, we able to know our account balance and in the same time make some purchases, pay bills and cut expenses.

According to Zgodavova, Kisela & Sutoova (2016) everyone in business need to know how to use information effectively and it is a good skill to have in life. In general, obtaining all the related information would help people make some key decisions. Meanwhile in organisation, ISM equipped management and staff in decision making process. Each people in business world has to make decisions. Making a decision is obviously important to the success of business. This skill is important at all levels of an organisation from the operational level to the managerial and right up to the executive suite. Must not in mind that every decision matter although the people at different levels of the company make different types of decisions Business and management systems should be set up to allow decision making at the bottommost possible level. Example, there a clinical laboratory uses ISM for decision support system. This clinical laboratory groups using ISM for management operating policies, coordination of control, use of responsibility and statically store the level of resolution (KLEMPA, 1983). As we can see, other than acceptance of decision making, decision making effectiveness also playing big role in organisation.

3.3 Support strategies for competitive advantage

According to Porter (1996) strategy is a policy or plan of accomplishment that is designed to achieve a bigger purpose and it helps in defining actions that an individual or an organisation may or may not take. Depending on the situation different organisation strategies may implemented different kinds of ISM. ISM can support organisation strategy and should be designed to be align with the strategy.

Michael Porter has come out with an excellent model for understanding how strategy affects competition of an organisation. Porter (1996), explained that competitive advantage is about being diverse unlike others. It also means purposely selecting to perform different activities than competitors or to perform activities differently to deliver a unique combination of value. This model can help in different ways which can be used to help support strategies for a competitive advantage.
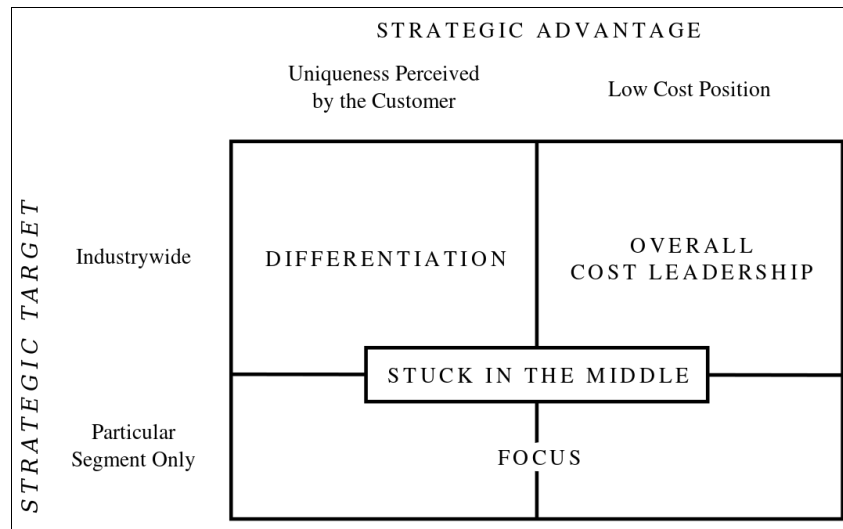
Figure 4: Porter's Three Generic Strategies

Carefully and completely rethinking and organisation's goals and processes. Once strategies developed, owner need to ensure that it can be realign with the ISM. Some of other benefits are the overall cost will be low, different in requirement since it is built to user's specifications and more focus on business analytics by analyse and identify a specific market segment.

4. CONCLUSION

We have been trying to make the technology, computer, software and hardware better. In ISM it is to make the business better and we use technology to make it come to real. By knowing the business disciplines and core to understand on the business function and what exactly to make business work better. Other than that, we can take technology to tailor it with business and customise it accordingly. People who owns both technical and management skill able to understand and concentrate more deeply ISM. Information system management needs to be implemented vastly throughout any organization.

Organisation that practices good ISM processes able to understand in depth of their business process and later able to measure the performance. As for our organisation, we are always using ISM as a complimentary to our everyday business process. ISM provides what people are lacking of. Example, keeping up with everyday meeting invitation could be a mess. With ISM, we don't have to worry about missing dateline and appointment. Although it is lots to be improve but somehow, we see this has helping us a lot. ISM able to make our organisation in line with managing general process and operations in organisation, improve decision making for management and staff and last but not least support strategies.

In addition, there are lots more competency that can be found in ISM. Some of other competency suggestions are accessible and up to date, community of practice and lastly policies, procedures and tools documentation can be extended. Once we have traced out all the capability, the organisation able to know what is the next of action that need to be changed and implemented in ISM. But there are some cases where organisation change does not appear in

the taken place. Thus, a proper investigation should be carry out in order to identify the missing mechanism.

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