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MASTER OF BUSINESS ADMINISTRATION

Factors Influencing E-learning Practices

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ABSTRACT

E-learning practice is committed to develop an organization and to bring about a revolution to the traditional learning practice. E-learning practices is derived and developed with supporting factors to achieve the needs and wants of the organization. The factors and characteristics of e-learning provide the concatenation of technology with learning objective. The factors and characteristics forms the backbone of e-learning, this study incorporates factors like employee skills and attitude, infrastructure, trainers expertise and budget. The study is carried out to describe the relationship and the perception of e-learning and its factors. Today's business environment is pushed to a state where e-strategy becomes the prime development objective of the organization. E-learning complements the e-strategy with its dynamicity but this provides an insignificant approach towards incorporating e-learning within all organization. Each and every factor has different influence on e-learning practices. Without proper standards and understanding of the factors it creates a challenge to successfully practice e-learning. A total of 124 respondents from two companies were used as a sample for the study. Descriptive and causal research methods were used with a survey method of questionnaire to gather the necessary data pertaining to e-learning practices. The gathered data was analyzed using a series of analysis consisting of repeated measure, Pearson (r) correlation and multivariate regression. The research identified that factors like employee skills and attitude and infrastructure proved to be a vital component to e-learning practices. On the other hand, budget and trainers expertise did not contribute as much towards e-learning practices as compared to the other factors. Although all the factors influencing e-learning practices used in this study has a significant relationship, the impact level varies from one another. As a result, organization incorporating e-learning practices is required to vitalize the factors based on the needs and wants.

Keywords: E-learning practices, employee skills and attitude, infrastructure, trainers expertise, budget

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Chapter I

Introduction

1.1 Background

E-learning practices are not changing the way organization develop, but revolutionizing the path they take to achieve their goals. Small and medium sized enterprises (SME) are facing problems pertaining to e-learning whereby the e-learning technologies, methods and strategies have mostly been developed for the needs of large enterprises and cannot be exactly transferred to their needs.

The word e-learning practices can be looked up as "an electronic learning process to incorporate technological advancements within an organization making the whole organization based around technology to perform their task and evolve in the business environment" (Sambrooks, 2000). Companies like, ABX couriers, B.B TECH SERVICES SDN BHD, VReal Enterprise are some of the pioneers in the e-learning implementation according to SME directories of Malaysia (smedirectory of Malaysia, 2000-2001)

Electronic learning in Malaysia is an upcoming trend in most of the SME and large organization. This creates a strong force for the organizations portraying developments in terms of technological and succession oriented. Over the past few years, e-learning is a central theme towards achieving sustainable economic growth for SME's as well as large organizations. E-learning practices are crucial to the economic growth process and play an important role overall production network of Malaysia.

The Malaysian Government's commitment to, and concern for, the development of SMEs has been clearly evident since the early 1970s. The government's commitment to the development of SMEs can also be seen in the second Industrial Master and Third Industrial Mater Plan (IMP3) 2006–2020, to coincide with the country's vision for 2020 (MITI, 2005). This indicates that the technological development (e-learning development) of firms is the future of a successful entity. The Malaysian Government has implemented various policies and strategies under these plans of technological e-learning concepts. The IMPs were formulated to enhance the growth of the manufacturing sector across the entire value chain and cluster-based industrial developments. Hence, this plan provides an integrated approach to the development of industrial areas and opportunities for growth of SMEs

SME's in Malaysia are the upcoming multinational companies of the future. SME's operate in almost every sector of the economy. Therefore, they vary widely in their e-learning needs. A company is qualified to be an SME if they are able to fulfill the criteria of an SME in terms of the number of employees that they have as well as the annual turnover of the organization. Small and medium enterprises in the manufacturing, manufacturing related services and agro-based industries are enterprises with full-time employees not exceeding 150 OR with annual sales turnover not exceeding RM25 million (SME Corp of Malaysia, 2010).

E-learning practices ranges from basic e-learning components such as telecommunication to more advanced technology such as email, e-commerce, and information processing systems. In addition, using e-learning to improve business processes falls into the category of e-business. However, not all SMEs need to use e-learning to the same degree of complexity. The first e-learning tool that most SMEs adopt is having basic electronic and technological process with computers and emails, whichever is more economical or most convenient for their business.

In Malaysia, manufacturing companies are the prime implementer of e-learning practices, with 45% of them incorporating e-learning their business process

(Vadim Kotelnikov, 2007). E-learning plays a very important role because it can help SMEs to both create business opportunities and combat pressures from competition. Appropriate e-learning practices can help SMEs cut costs by improving their internal processes, improving their product through faster communication with their customers, and better promoting and distributing their products through online presence. Moreover, e-learning has the potential to improve the core business of SMEs in every step of the business process. (Watkinson, 2002).

1.2 Problem statement

Facing pressures from an increasingly competitive business environment, small and medium enterprises (SMEs) are called upon to implement strategies that are enabled and supported by information technologies and e-business applications in order to compete with other organizations. E-learning can be a powerful tool of development for most organizations. These tools even though implemented, it would not be efficient without proper adaptation procedures in the organization (Hall & LeCavallier, 2000). SMEs are striving to implement new and efficient technologies to create a base that makes them stand out and e-learning is becoming the focus of today's SME with development and success as their mantra's (Daelen, Miyata & Petegem, 2005). According to Jennifer De Vries (2008) from Adobe, e-learning in today's world is just a gimmick that has been used to showcase the company's development. However, the fact still remains that most of the organizations still prefer traditional methods of learning and training. Authors like Bryman and Bell (2002) argue that e-learning could only be looked up as a supportive factor and could not be looked up as the tool for development in most of the organizations. With contradicting perspective in e-learning, the common understanding of e-learning is that, e-learning can only be successful if there is a certain adaptive level of the organization.

Organizations practicing e-learning adaptation would be able to use it as a tool for the organization's growth and development. However, most SMEs are

hesitating in implementing e-learning in the workplace due to several factors that revolves around the implementation of e-learning. These factors would influence the adaptation and acceptance level of e-learning practices in an organization. Research on e-learning in the workplace is deemed to require a better theoretical grounding on the ways e-learning can benefit the organization (Dawe, Nguyen, & Halkett, 2007). There is not that much e-learning applied in small, medium sized companies (SME's), and that most of the few activities undertaken are of rather poor quality in most the SME in Malaysia (Tyanjala & Hakkinen, 2005). In order to progress or succeed it is important for SME or any organization to identify and manage the various factors that can influence e-learning practices.

The key factors (independent variables) that authors such as Stockley (1999), Hawke (2000), Scheuermann & Reich (2002), Dawe & Nguyen (2007), and also Kruse (2003) have identified in having influence on e-learning practices (dependent variable) in the workplace are infrastructure, employee skills and abilities, trainers and budget. In regards to the effectiveness of the e-learning in the organization, there could be major positive development being noticed from the process carried out by employees to the strategies put forth and applied in the organization via the e-learning effectiveness.

Logically, this is very difficult to manage, as the portfolio of the organization need to be revamped from the starting point as e-learning practices become effective through factors like infrastructure, employee skills, trainers and budget that provides the base. The adaptation of e-learning practices in SMEs is proven to be challenging due to the factors. As various factors may influence at any one time in a SME (or any organization), there exist a knowledge gap in terms of identifying the nature of linkages between the independent variables identified and e-learning practices. In determining the relationship of these variables, appropriate action can be suggested for better adaptation of e-learning practices. Without knowing the efficacy of e-learning strategies one cannot know the value of their use. Without appropriate e-learning practices, the effectiveness of e-learning in SME can be questioned. The e-learning practices can constitute a useful tool to base decisions on the use of any strategy in SME,

for which can be achieved via the factors like infrastructure, trainers, employee skills and abilities and budget (Figueira, 2003).

1.3 Research questions (RQ)

RQ1: How does SME employees perceive e-learning in the organization?

RQ2: what are the significant differences among the independent factors?

RQ3: What is the potential relationship that the key factors such as infrastructure, employee abilities and skills, trainer as well as budget has with e-learning practices?

RQ4: What are the predictors of e-learning practices?

1.4 Research objectives (RO)

Based on the research questions above, the research objectives are to determine:

RO1: The perception level on employee skills and attitude, infrastructure, trainer, budget and e-learning practices in SME.

RO2: The significant differences in mean scores among the independent factors.

RO3: The strength of relationship of employee skills and attitudes, infrastructure, trainer and budget with e-learning practices.

RO4: The predictors of e-learning practices.

1.5 Significance of study

The research provides ways e-learning practices can be implemented in the SME with all the factors surrounding it. The factors influencing e-learning would showcase the ways e-learning practices can be made accessible to all the SME and the methods to which they can be implemented without much hindrance. The significance of study indicates how e-learning can be used to fulfill the

objectives of the small organizations with effective and efficient means to bring about success in the organization for the business plan of today, tomorrow and the near future. Furthermore, this research can highlight the various negative aspects that are perceived by the SME in terms of e-learning implementation. These factors will be outcomes of the reach for the SME to use as a guideline to improve their existing practices and for the implementation of e-learning in the organization. The beneficiaries of this research are the SME's that are willing and planning to incorporate the e-learning practices in the country.

Using this study, the SME can provide the choice to select the ICT based material which are generally not available them because of the various factors that might affect it. Since most of the SME's are dependent on larger organizations for e-learning contents in order improve the management of the SME, this study can resolve the problem of inter-dependency amongst the organizations. This study would also provide the significant market factors that will affect the SME in terms of e-learning implementation. Hence this would provide the organization with an effective and efficient structure to follow when bringing in e-learning within the organization. In most cases, they do not develop e-learning materials themselves, but using this study as the guideline the SME does can get a clear structure and the ways management apply or implement e-learning practices into SME's successfully.

1.6 Limitation of study

The limitations of this study are:

- Firstly, because information is gathered from employees in SME from every sector, most SME's might not have enough knowledge in e-learning. Since the research is focusing on e-learning factors in SME, it would require detailed feedback from SME's involved in the research.
- The second limitation for the research is the time constraint and the limited duration available for carrying out the research on e-learning practices,

which is a massive area to gather the information especially in terms of SMEs.

- The third limitation is derived from the second limitation whereby due to the time constraint there were only two SME organizations that was used for sampling and the employees from those organizations were the target population.
- In this research, it uses the survey research method. The research makes sampling for the SME employees, who have basic understanding of the factors that can influence the implementation of e-learning practices within their organization. The survey findings will not be generalized cross other group of population. It will create a limitation to complete a deeper research about the impact of e-learning and the factors that causes the problem in implementing the practice within the organization. Further research could expand the survey in order to reduce the sample errors.

1.7 Assumptions

The assumptions for this study are that respondent's knowledge for the e-learning practices in the SME are feasible to conduct the research. In addition, e-learning practices can be regarded as the technological factor that can cause changes in the organization's performance immediately once adapted within the organization. SME's focus for any practices in the organization would be based on cost, employees and the business itself. Any practice that is being implemented in the organization has to satisfy all these constrain to be successful in the organization. SME's even though is a small level organization, the diversity of employees would certainly have an effect on e-learning practices due to the acceptability of the employees.

1.8 Operational definitions

Small and Medium Enterprises – Small medium enterprise are growing organization with fewer management structure and employees of approximately 9 - 150 for the whole organization. SME creates a base stage for most organization and most of the concepts developed and implemented in SME prove the success and the failure of the organization regardless of the financials or employees.

E-Learning Practices – E-learning is the core module of this research. An e-learning practice is the upcoming factor in most of the SME organization. In the SME, where e-learning is the base of the business operations; e-learning is the tool that pushes employees to benefit the organization to gain success from the management via the e-learning practices. An e-learning practice in the organization is the key factor that improves the performance capability of the organization on the whole in the SME. E-learning practice in SME also covers a wide set of applications and processes which utilize all the available electronic media to deliver vocational education and training more flexibly. The e-learning practice is defined by answering "agree" when asked if the organization has been able to successfully implement e-learning practices in this SME.

Employee skills and attitudes - Employee skills and attitude is the contributing factor for the research as the factor that influences the e-learning. Employee attitude and skills is the perception of the employees towards a particular task or a job where it portrays a particular skill set of the employee to perform their required activities. The employee skills and attitude is defined by answering "agree" when asked if the e-learning training conducted were able to help them enhance the learning process.

Infrastructure - Business infrastructure in SME is the base that brings together the organization and the resources that forms the foundation for the SME to exist from the financial to the assets necessary the run the business. The infrastructure is defined by answering "agree" when asked if the organization

has adequate training materials that facilitates the training needs of the organization

Trainers – Trainers play an important role in ensuring that e-learning materials in the SME are delivered appropriately to the employees. This would ensure that e-learning objective of the organization has been met. Trainers utilize the resources to gain optimum level of benefit for the employee skills and the organization development. The trainers are defined by answering “agree” when asked if employees are satisfied with the overall performance of the trainers provided by the organization.

Budget - Budget is the stand point of the SME, most of the transactions and the developments in SME is firmly dependent on budget provides the base for improving the organization and structuring of the SME to a new level of business and to move it into a higher scale

Chapter II

Literature Review

2.1 E-learning

Abram (2003) defines e-learning as basically using the computers, internet, and intranet technologies to provide computer skills to an individual in a synchronous or asynchronous mode, while for Welsh, Wanberg, Brown and Simmering (2003), it is defined as "the use of computer technology, primarily over or through the internet, to deliver information and instruction to individuals". A report by the American Commission on Technology and Adult Learning (ASTD, 2001) states that "e-learning is instructional content or learning experiences delivered or enabled by electronic technology".

The Conference Board of Canada's Workplace E-learning (2001) report states that e-learning uses information and communications technologies (ICTs) to deliver content (learning, knowledge and skills) on a one-way or two-way basis.

2.2 E-learning practices definitions and characteristics

E-learning practices are "practice" that is pursued, enabled or mediated by electronic technology for the organizations. The use of e-learning depends strongly on the size of the company. Small and medium-sized enterprises use it considerably less than large companies (CIPD, 2006).

A number of obstacles to e-learning practices have been identified in the SME's organizational structure; the total lack of e-learning culture within the companies and the attitude of individual managers, the ability of the company to have the resources and process to accommodate the use of e-learning practices. This leads to a lack of effective analysis of the competence needs and hampers