

The Moderating Role Of Organization Size On The Relationship Between Individual Characteristics and System Conditions On Successful Implementation Of Human Resource Information System (HRIS)

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Abstract

Past studies on HRIS have not established the moderating role of organization size to the successful implementation of HRIS. Therefore, this study will examine the relationship between individual characteristics and system condition to the successful implementation of HRIS with organization size as a moderator. Technology Acceptance Model (TAM) will be used to explain user satisfaction and system usage to measure the success of HRIS implementation.

Introduction

Successful implementation of Human Resource Information System (HRIS) in executing Human Resource Management (HRM) functions such as recruitment, selection, benefit and reward management, training and performance assessment (Grensing-Pophal, 2001; Fisher & Howell, 2004) has helped organization to enhance its efficiency in managing human resources (Hurley-Hanson & Giannantonio 2008; Ngai & Wat 2006; Swee 1998; Snell, Pedigo, & Krawiec 1995). As Human Resource (HR) functions become increasingly reliant on information technology systems, it is important to examine the effects of such systems on the successful implementation of HRIS. The implementation has to be planned carefully to achieve the objectives. Any failure in the implementation will have negative effects on the organization including the costs incurred (Ives & Baroudi, 1983) to implement HRIS. However, past literature suggested that nearly half of all new technologies implemented in organizations failed (Aiman-Smith & Green, 2002; Fisher & Howell, 2004). From HR perspective, failed implementation of such systems can be particularly disruptive, as failure lead to cynicism about future change efforts (Reichers, Wanous & Austin, 1997).

Zmud (1979) has found that previous studies on HRIS users have identified organization feature, organization environment, task, individual, interpersonal, employee information system feature and management policies concerning information system as factors that influence a successful implementation of HRIS. Studies related to information system conducted by various reseachers have placed individual characteristics as one of the variables; as they have found that the success of information system implementation to be greatly influenced by individual characteristics (Haines & Petit 1997; Igbaria & Chidambaram 1997; Ngai & Wat 2006; Park & Chen 2007). Several researchers have found that the individual characteristics and system conditions are the vital factors in order to explore the successful HRIS implementation of an organization (Anthony, Kacmar & Perrewe 2002; Haines & Petit 1997; Igbaria & Chidambaram 1997). Other studies have established organization size as an important moderating factor in information system implementation. However, studies on HRIS have not explored organization size as a moderator. Therefore, there is a lack of study on organization size as moderating variable to examine the successful implementation of HRIS. Harrington and Kendall (2007) and DeLone (1981) have found that organization size as significant predictors of involvement and success on strategy and system implementation in the organization. Although a number of studies have been done previously on the usage of computerized computer

system, the literature on successful HRIS implementation is still under study particularly system usage in implementing HRM function.

Based on previous study by Haines and Petit (1997), successful implementation of HRIS in the organization has been conceptualized as two dimensions of users satisfaction towards HRIS and system usage within the organization. Ball (2001) claims that users satisfaction is an important aspect to consider for successful implementation of HRIS. Individual characteristics and system conditions are also factors that would influence the successful implementation of HRIS in organization (Anthony, Kacmar & Perrewe 2002; Haines & Petit 1997; Igbaria & Chidambaram 1997; Arris, Ragnathan & Kunnathar 2000). Besides, organization size will be used as moderating variable to examine the successful implementation of HRIS. Thus, the purpose of this study is to determine the relationship between individual characteristics and system conditions on successful implementation of HRIS as it is moderated by organization size.

Successful Implementation of Human Resource Information System (HRIS)

Ball (2001) stated that the successful implementation of HRIS has significantly affected the operation, relation, and development aspects of the organization. Information technology used in human resource management is widely known as Human Resource Information System (HRIS). HRIS is a system that is used to retrieve, store, analyze, manipulate, correct errors and distribute information accurately relating to human resources in an organization (Pintelon, Preez & Puyvelde, 1999). Successful implementation of HRIS in an organization requires commitment and involvement of various parties and also depends on the development of the system ease of use. The successful implementation of HRIS enables management and human resource executives to analyze employee's data stored in this system. It helps to attain fast and accurate analysis results relating to human resource (Pintelon, Preez & Puyvelde, 1999). Effective decision and analysis using HRIS will make the organization to be more competitive in utilizing the organizational resources effectively and efficiently. This will facilitate the organization to acquire market competitiveness (Morgan, 2003).

Introduction to HRIS

HRIS is a system that is utilized to retrieve, store, analyze manipulate, correct errors and distribute information accurately relating to human resources in the organization. Ball (2001) in his study has mentioned that HRIS is a system that uses computer technology function to store, connect, analyze and present data relating to human resource in an organization. According to Ivancevich (2004), HRIS refers to a collection of methods and approaches to retrieve, store, analyze and monitor the flow of information throughout the organization and is more than just an inventory. HRIS that has been developed by an organization can be used to execute all functions of human resources. This system includes the ability as inventory program, career planning program and worker service program such as electronic bulletin.

Meanwhile Ceriello & Freeman (1991) defines HRIS as a system that allows users to manage employee records where data is inserted into the system and can be retrieved from the communication network or personal computer. The output can be viewed online or printed. Thus, it can be concluded that HRIS is a system that has been developed by an organization to collect, gather, store, analyze, rectify, manipulate, distribute data as well as the generate a flow throughout the organization.

Based on all of the definitions above, by effectively using the HRIS, every department and unit in the organization can obtain information it needed quickly and easily. This includes preparing reports and planning for units and departments. This is because, every data and information with regards to every employee at every level in the organization can be obtained by using HRIS. Besides

that, upper management can also obtain information of existing human resource ability level accurately and easily for the organization's overall planning.

Human Resource Information System Success

Successful implementation of HRIS provides positive impact on the effectiveness of human resource management in an organization. This is because, human resource is an important asset for organization to achieve its organizational objectives and daily operations. Thus, a reliable, effective, efficient and an orderly human resource management can provide a harmonious working environment between the employer and employees. And this will assist to the improvement and success of an organization. According to Desimore, Werner & Harris (2002), HRIS usage in an organization can increase accuracy of data, quick data processing, develop sophisticated report as well as improve productivity.

Swee (1998) however, claimed that the implementation of HRIS in an organization can provide power to employees in monitoring their own information, decrease data error because employees are able to monitor personal records and allow users to access information according to their need. This is due to the network that is has been build, so that HRIS users can retrieve their information at any time according to their needs. In addition to that, implementation of HRIS can enhance the level of employees service. Because employees feel that they are being appreciated and needed in achieving the objectives of the organization. This occurs because employees are given responsibility to guard and monitor their own personal data and information.

Based on the above opinions, Desimore, Werner & Harris (2002) viewed the benefits of HRIS usage from data management perception in the organization is that it can stimulate productivity. Swee (1998) on the other hand, viewed the implementation of HRIS from employees point of view. By involving employees to ensure accuracy of personal information, resulting in employees appreciation and help increase employee's sense of belonging toward the organization, which in turn helps stimulate motivation to work. Looking at both perspectives, it can be concluded that optimum HRIS usage and effective management can improve employee motivation as well as productivity. Snell, Patricia & Krawiec (1995) also have similar opinion about the benefits of HRIS implementation in an organization but they viewed it more on the impact of the implementation.

To clarify HRIS implementation, system users play a vital role to the success of the implementation. Pintelon, Preez & Puyvelde (1999) defined HRIS users as human resource managers, department of human resource employees, HRIS implementation experts, line managers, upper managers and training coordinators. They are important users who ensure the process of HRIS implementation will be performed smoothly to achieve targeted goals. The objective is to create a complete and accurate employee database such as employee evaluation report, knowledge, skill and career development in the organization is among the responsibilities of human resource managers today and in the future (Anthony, Kacmar & Perrewe, 2002). Consequently, the implementation of HRIS is viewed to be suitable to support this role.

In the 1980's, information system was used moderately in most organizations. Kavanagh, Guetal & Tannenbaum (1990) in their study extracted that most organizations only used computers to store data and for administration purposes. The study has also found that organizations did not use computer as a medium for planning and managing. The awareness of the importance of using information technology and competitiveness has changed the perception of management and organization about computer usage in managing human resources. According to Ball (2001), stiff competition and the need to make fast decisions have driven the use of HRIS in organizations. This is because organizations today are aware and have started to focus their attention on the most important asset which is the human resources. However, the process to develop HRIS is not easy as it involves

a systematic and meticulous process so that the creation of the system is able to support the goals of the organization.

Implementation of HRIS in an organization requires commitment and involvement of various parties. Its success also depended on the development of the system ease of use. According to Anthony, Kacmar & Perrew (2002), studies have shown that there is one out of two development information system projects that have failed to achieve development objectives. This situation happened due to several factors. According to Anthony, Kacmar & Perrew (2002), the failure of a project is linked to the system itself because it is difficult for users to understand and operate, the development process was unsystematic, not planned properly and lack of service from suppliers. This happened partly because the system suppliers failed to provide training to use the system, contributing to the lack of good understanding about the system.

The ideal assessment of HRIS success would probably includes data from a return on investment or utility analysis. Considering many constrains such as a financial approach, surrogate measures of effectiveness are often favoured. This may explain why in the information systems (IS) field of inquiry, user satisfaction and system usage have become the two common measures of successful implementation of HRIS (Haines & Petit 1997).

User Satisfaction and System Usage

Ball (2001) claimed that user's satisfaction is an important aspect to consider for the success of information system implementation. User satisfaction refers to a pleasurable entity or an entity that stimulates positive emotions from using HRIS in the workplace (Ball, 2001). System usage is defined by considering the length of system usage in the organization (Haines & Petit, 1997).

The usage of HRIS enables management and human resource executives to analyze employee's data stored in this system. It helps to attain fast and accurate analysis results relating to human resource (Pintelon, Preez & Puyvelde, 1999). Effective decision and analysis using HRIS will make the organization becomes more competitive by utilizing organizational resources effectively and efficiently. This will facilitate the organization to aquire market competitiveness (Morgan, 2003).

User satisfaction has received attention in previous information system (IS) research. In a setting where usage is voluntary, system usage is also considered to be an acceptable measure of success to the extent that the systems are used extensively only when they are perceived to be of value to the end user (Haines & Petit 1997). Together, user satisfaction and system usage provide a more complete picture of system success than if either measures were applied in isolation. The first is based on attitudes and beliefs whereas the second is based on behaviors. It should be mentioned here that these measures focus more on system success than on system sophistication. A system may be sophisticated, that is, it may have good relational database, but for a variety of reasons such as complicated interface, improper use or limited to equipment, it may be considered unsuccessful.

A number of conditions can help explain the levels of user satisfaction and system usage. Typically, the computerization process within the human resource management department begins with need analysis and is completed with the implementation and maintenance of the system. From the beginning to the end of the process, many decisions and conditions influence the final configuration of the system. For example, the system can either be developed internally or externally by acquiring it from a vendor. The system can provide a vast array of integrated human resource management applications or just one stand-alone application. Users may have acquired extensive computer experience or none at all. They may also have access to computer support, or they may function in relative isolation. These and other individual characteristics and system conditions are expected to influence user satisfaction and system usage.

Technology Acceptance Model (TAM)

Research about users' acceptance to information technology has been done by many researchers. They focused on personal computer usage (Igrabia et al, 1995) or acceptance to simple application software such as word processing, spreadsheet software and e-mail (Agarwal & Prasad, 1999; Davis, 1993; Davis, 1989; and Vankatesh & Davis, 1996) and digital libraries (Hong et al, 2002). Technology Acceptance Model (TAM) has been validated as a powerful framework to explain users' acceptance and adoption of information technology (IT). According to TAM, usage of an IT is determined by users' intention to use the systems, which in turn is determined by users' beliefs about the system.

One of the model that has been validated as a framework to explain successful implementation of HRIS and adoption of information technology (IT) is Technology Acceptance Model (TAM). According to TAM, usage of an IT is determined by user intention to use the systems, which in turn is determined by user's beliefs about the system. The model for information system is derived from social psychology theory known as Theory of Reasoned Action (TRA) (Ajzen & Fishbein 1980). TRA is very general where it is designed to explain virtually any human behavior (Fishbein and Ajzen, 1980). The adaptation of TAM from TRA is known as Technology Acceptance Model (TAM), which is specifically meant to explain computer behavior (Davis 1989; Park & Chen 2007). The goal of TAM is to provide an explanation of the determinants of computer acceptance that is general, capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified (Davis, 1989).

Key purpose of TAM is to provide the basis for tracing the impact of external factors on internal beliefs, attitudes and intentions. TAM posits that two perceptions are of great significant in influencing user acceptance and use of technology: perceived usefulness (U) and perceived ease of use (EOU). Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance, while perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989).

TAM has been applied to a wide range of information systems (Yi-Shun Wang et al. 2003; Venkatesh 1999), organizational context (Igarria & Chidambaram 1997), and user profile (Huo & Kearns 1992; Venkatesh 1999). According to Pikkarainen et al. (2004), it is imperative to examine the acceptance of new technologies with different user population in different organizational contexts. The subject of users' acceptance to information technology has been explored by many researchers. They focused on personal computer usage (Igarria et al., 1995) or acceptance to simple application software such as word processing, spreadsheet software and e-mail (Agarwal & Prasad 1999; Davis 1993; Davis, Bagozzi & Warshaw, 1989; Vankatesh & Davis 1996) and digital libraries (Hong et al. 2002).

Based on past literature, TAM has been tested in many studies (i.e. Davis 1989; Mathieson 1991; Segars & Grover 1993; Taylor & Odd 1995), and it has been found that TAM's ability to explain attitude towards using an information system is better than other model's (Theory of Reasoned Action and Theory of Planned Behavior) (Mathieson 1991). These studies have found that TAM consistently explains a significant amount of variance (typically around 40 percent) in usage intention and behaviour. The use of an information system has been understood in many studies as the user acceptance of the information system in question (Davis 1989; Davis 1993; Al-Gahtani 2001). In other words, the use of information system acts as an indicator for information system's acceptance.

Previous studies using TAM have been confined to areas of information systems, organizational context, user profile, personal usage of computer, and digital libraries. Therefore, this

study would extend the usage of TAM in the area of Human Resource Management since information technology has shaped the organizational component of a company (Hurley-Hanson & Giannantonio 2008; Ngai & Wat 2006; Ngai, Law, Chan & Wat 2008). Furthermore, many researchers have reported that previous studies using original TAM did not incorporate the external contextual variables that may be important in predicting perceived usefulness or perceived ease of use (Musa 2006). The advantage of using a TAM model as the research model is that various modified TAM models have been empirically supported in the literature as a powerful framework for examining information technology acceptance factors (Jiang, Hsu, & Lin, 2000).

Past Research

Hurley-Hanson and Giannantonio (2008) maintains that the importance of HRIS has increased substantially and has become important in all industries in particular after the September 11 incident where organizations need to develop their HRIS system extensively to enable them to continue operations that include avoiding employee information being destroyed during such crisis. Furthermore, past research on HRIS have focused on the users (i.e Fisher & Howell 2004; Swee 1998; Park & Chen 2007; Ngai et al. 2008; Haines & Petit 1997), benefits (i.e Haines & Petit 1997; Musa 2006) and implementation (i.e Snell, Patricia & Krawiec 1995; Haines & Petit 1997; Musa 2006; Ngai & Wat 2006; Ngai et al. 2008) of HRIS.

A study by Haines & Petit (1997) derived from a few questions such as cost of developing and implementing the system, lack of user's involvement, design of the system which contributes to the success of such system, support from management and characteristics of the system. Because of that, the system development and implementation needs to be planned carefully to achieve the objectives. Failure in implementation will have a negative effect on the organization because the organization will have to bear the costs of development and implementation of HRIS. Implementation of HRIS has indirectly influenced management style and employee's work style in an organization. Thus, to ensure the support of employees and to adapt to the new condition, the organization needs to plan and provide relevant trainings to employees who are involved in the implementation of the system.

Haines & Petit (1997) in their study looked into three characteristics that determine the successful HRIS: individual, organizational and system characteristics. They have considered seven individual characteristics that are expected to influence user satisfaction and system usage: age, gender, education, task characteristics, work experience, computer experience, and computer understanding. Three organizational conditions are size, availability of internal user support and organizational computer experience. There are six system conditions that are expected to influence user satisfaction and system usage: involvement, training, support, documentation, applications development and system functioning conditions.

On the other hand, Yi-Shun Wang, Yu-Min Wang, Hsin-Hui Lin and Tzung-I Tang (2003) and Pikkarainen, Pikkarainen, Karjaluoto, & Pahlila (2004) in their studies used TAM to study user acceptance of online banking system. This is because TAM has been validated as a powerful framework to explain users' acceptance and adoption of information technology. According to TAM, usage of an IT is determined by users' intention to use the system, which in turn is determined by user' beliefs about the system. Pikkarainen et al. (2004) study focuses on the perceived ease of use (PEOU), perceived usefulness (PU), perceived enjoyment (PE), information on online banking, security and privacy and quality of internet connection as an independant variable and online banking use as a dependant variable. Yi-Shun Wang et al (2003) study only focuses on the relationship PEOU, PU and perceived credibility towards computer self-efficacy and behavioral intention.

Although there are different variables used by the studies above, they still focus on the factors which will influence user intention and behavior to use the system in their work. The system will

enable users to monitor their personal information and decrease data error. In addition, implementation of the system can enhance the level of users satisfaction. This is because they feel that they are being appreciated and needed to achieve the objective of the organization. By involving users to operate the system can result in their appreciation and help increase their sense of belonging toward the organization. As a result, it helps stimulate motivation to work. It can be concluded that optimum HRIS usage and effective management can improve employee motivation as well as productivity. Yi-Shun Wang et al. (2003) also have similar opinion about the benefit of system implementation in an organization but their view it more on the impact of the implementation.

Study by Wicks (2002) have found that employee satisfaction increases with the usage of information system particularly for employees who have to work outside of the organization. That they can easily obtain information needed through a system accessible online although being away from the organization. Besides increasing a sense of belonging towards the organization, the employees performance found to be enhanced. Employee satisfaction can also be seen from the record of decreasing absenteeism. The employee satisfaction factor in using the system and the improvement in employee performance become the measure for the successful implementation of the system in an organization. Therefore, it has shown that ease of use, easy to understand and easy to access are some of the factors that influence the successful implementation of a particular information system in an organization.

Yi-Shun Wang et al (2003) study examined the relationships between the experience in using computers and the results achieved towards the access through the banking information system as well as confidence level of the respondents towards the security of data stored in the information system. Yi-Shun Wang et al. (2003) have found that there are positive relationships between the experience in using computer and the benefits obtained by accessing the information within the system. Besides, the system features that are easy to understand and use, which can reduce respondents uncertainty on the ability of the system to provide information for them. In fact, respondents feel more secure to make internet banking transactions because of the use of password for example can reduce the risk of exposing their personal information to unauthorized party.

Previous discussions have pointed out studies on HRIS by researchers from the west. Because HRIS is a new thing in Malaysia, there are very few studies on it (Norazuwa, Duratul Ambia' and Ruslan, 2000). Studies done by some researchers in Malaysia are more focused on the level of computer usage in implementing human resource functions within an organization. Norazuwa, Daratul Ambia' and Ruslan (2000) have studied the impacts of HRIS implementation in manufacturing companies in the northern parts of Peninsular Malaysia. The study compared the usage of HRIS between organizations in Malaysia and in the United States. Findings of the study showed that most organization in Malaysia are still managing human resources using manual method.

Meanwhile, Mohamed, Suraya and Zainal (1998) have studied factors that influenced the success of HRIS in manufacturing companies in Malaysia. The study looked into individual and system features factors towards the successful implementation of HRIS within the organizations. The study suggested two independent variables that influence the success of HRIS which are the organization and environment. Findings from the study found the existence of environment and organization influence towards the success of HRIS implementation within an organization.

Based on past research, both individual characteristics and system conditions are related to each other and influence the successful implementation of HRIS. Past literature also has established direct influence of organization size to the system success (Harrington and Kendall 2007; DeLone 1981; Haines & Petit 1997) but not as a moderator. Consequently, there is a lack of study on moderating role of organization size to determine the successful implementation of HRIS.

Individual Characteristics as Independent Variable of Successful Implementation of Human Resource Information System (HRIS)

Characteristics is a prominent or distinctive aspect, quality, or features of person. It is related to the employee himself and influence his thought and behaviour. According to Robbins (1998), individual characteristics is a general picture on how person reacts and interacts with another and strong individual characteristics projects the continuous behaviour of a person (Desimore, Werner & Harris, 2002). In addition, individual characteristics as an employees has also been studied to discover whether their knowledge and skills are compatible and can support the implementation of HRIS. Legge (1989) and Hall and Torrington (1986) argued that employees' knowledge, skill and abilities should be identified for the implementation success in an organization. This is because, apart from using the system, it is the employees who have to manage the information derived from the HRIS so that it would benefit the process of decision making in the organization (Hirschorn 1984). This shows that the individual factors is vital for the implementation of organizational HRIS.

Studies related to information system conducted by various researchers have placed individual feature factor as one of the variables because they have found that the success of information system implementation is greatly influenced by users features (Snell, Pedigo & Krawiec, 1995). Users who do not understand how to operate the system harm the development of such system. Haines and Petit (1997) study perceives that individual features factor which influences the success of HRIS implementation are age, sex, education, tasks features, working experience, computer literacy and computer understanding. The result of their study found that there is no significant differences between gender and users satisfaction and system usage level. However, tasks characteristics was found to influence the level of satisfaction and system usage.

Individual task characteristics such as the structure of decision making, the type of work accomplished, and the decision making level in the organizational hierarchy are also expected to influence system success. The more structured the tasks being accomplished, the easier the development process and the greater the likelihood of implementation success (Cheney, Mann, & Amoroso, 1986). Furthermore, the tasks at higher levels of an organization tend to be less structured and thus less easily assisted by computers (Mawhinney & Lederer, 1990).

Besides, working experience and length of usage in a position influence system usage level developed (Haines & Petit, 1997). This is also supported by Igarria & Chidambaram (1997) who have found that users style of thinking about executing a task can influence system usage level and style of thinking usually were attained from working experience in a position/department. Work experience is expected to influence system usage. It has been suggested that the length of time in an organization or in a position can change the way individuals make use of the formal and informal information (Euerst & Cheney, 1982). Furthermore, users with more computer experience are expected to be more confident in their ability to use the system and more satisfied with the experience (Igarria & Chidambaram, 1990). A study showed that subjects with more previous computer experience were more likely to develop their own applications in the early stages of an experiment than were subjects with limited previous computer experience (Kasper & Cerveny, 1985).

Based on the above descriptions, it shows that individual characteristics influence the success of HRIS implementation in an organization. And, all these factors are beyond management control. However, management can utilize all individual factors to help achieving the success of HRIS implementation in an organization. Encouragement and examples of work culture experience and ethical values can drive employee and system user in benefiting from the system and efficiently and effectively conduct daily activities (Arris, Ragnathan & Kunnathar, 2000).

System Conditions as Independent Variable of Successful Implementation of Human Resource Information System (HRIS)

According to Anthony, Kacmar & Perrew (2002), system is a set of activities that possess inputs and those inputs will be changed into outputs. Haines & Petit (1997) on the other hand stated that system refers to a specific language that performs and also monitors software activities. Whereas software is defined as the computer program that executes specific functions. And HRIS is a collection of various software that collects, restores, guards, ejects and confirms data regarding employee, applicants and detailed work activities.

HRIS system that was developed also influenced the success of HRIS implementation. According to Anandarajan, Igarria & Anakwe (2000), a user friendly system is the success indicator of implementing a system in an organization. Beside that, users confident towards the ability of the system to attain accurate output also drive user to use the system frequently (Yi-Shun Wang et al., 2003). Haines & Petit (1997) study found that users involvement in the development and implementation of a system in an organization is another vital factor of implementation success.

Haines & Petit (1997) in their study found that most system factors have significant relationship with user satisfaction but no significant relationship with system usage. However, user involvement in the system development and implementation, suppliers training and management support could not describe user satisfaction and system usage. But, there is a positive relationship between internal training, accesibility, documentation, self training and easily use system with user satisfaction. Users who receive more HRIS training are expected to be more satisfied with the system and to use it to a greater extent (Haines & Petit 1997; Davis 1993). It was expected that users with more HRIS training would be more satisfied with their level of computer competence and thus express higher level of satisfaction and use.

Foong (1999) study is different from Haines & Petit (1997). He found that user involvement has a significant relationship with satisfaction and system usage. Additionally, users satisfaction and system usage have close relationship with computer system and computer instruments. Thus, user involvement towards the system has direct relationship with computer usage. However, Foong's (1999) findings are similar to Haines & Petit (1997) in terms of upper management support towards satisfaction and system usage. Hence, it can be said that system factor has relationship with the success of HRIS implementation in an organization. Even though, there exist different opinions about a certain factors, but they still have relationship with satisfaction and usage level of HRIS in an organization.

Users who receive more support from general management and from their immediate supervisor for using the system are expected to be more satisfied with it and to use it to a greater extent (Yi-Shun Wang et al. 2003). The expected relationship originates from the planned organizational change literature which emphasized management support as a condition for successful change (Daley. 2002). Besides, Users who have free access to hardware and software products are expected to be more satisfied with the system (Hong et al. 2002) and use the system to a greater extent (Haines & Petit 1997; Davis 1993). In human resource management, being independant from information staff and services has been an important issue (Daley 2002). The more free one has to access the system, the more he/she is satisfied with using the system and hence supports the implementation of the system.

From past researches, individual characteristics and system factors show their influence to the successful implementation of HRIS. This is due to the fact that both factors have been identified as the major influencing factors compare to the other factors. Previously, there are studies about direct influence of organization size to the successful implementation of HRIS but not as the moderating role of organization size. Therefore, this study will examine the moderating role of organization size to the successful implementation of HRIS.

The Moderating Role of Organization Size

Harrington and Kendall (2007) and DeLone (1981) claimed that organization factor plays an important role in the successful implementation of HRIS in an organization. The organization's capability and support towards the implementation of HRIS can influence its successful implementation. Haines and Petit (1997) in their study refers to organization factor as the size of organization and support received towards the system usage.

Larger organizations are seen to be more successful in implementing HRIS than smaller organizations (Swee, 1998). This is because implementation of a computerized system in an organization requires a high cost. Therefore, smaller organizations have to consider the cost-effectiveness of using computer system to manage their human resources (Gomez-Mejia, Balkin and Cardy, 1998). In comparison, large organizations have more employees, bigger capital and bigger profit margin. Thus, for an organization which has small number of employees, the manual method is more suitable to be used in managing its human resources compared to an organization with bigger number of employees. This is consistent with research findings by Ball (2001) which found out that an organization with bigger number of employees is more suitable and likely to succeed in implementing HRIS than a smaller organization. This is consistent with findings by Kinnie and Arthurs (1996) in private sector. The study found out that there is significant relationship between the size of the organization and the implementation of HRIS in an organization.

The findings above are different than research findings of Haines and Petit (1997) which looked into the influence of organization factor to successful implementation of HRIS. They found out that organization size or department size in implementing HRIS does not have a significant relationship with user satisfaction on the system and system usage level. The research also found out the relationship between management support towards user satisfaction and system usage level in the organization. Past researches have shown that there is a direct relationship between organization size and successful implementation of HRIS (Harrington & Kendall (2007); DeLaone 1981; Haines & Petit 1997). Although there are studies on moderating role of organization size on the implementation of information technology; no study has been conducted to examine the relationship between individual characteristics and system conditions to the successful implementation of HRIS moderated by organization size.

Therefore, it can be concluded that organization size does influence the successful implementation of HRIS in an organization. However, the moderating role of organization size has to be studied further to see the effects on the relationship between individual characteristics and system conditions to the successful implementation of HRIS.

Proposed Conceptual Framework

Past literature has established the relationship between individual characteristic and system condition to the successful implementation of HRIS. Thus, this study is aimed to conform the relationship with the moderating role of organization size to the successful implementation of HRIS. Individual characteristics that influence the success of HRIS implementation covered in this study are individual task characteristics, work experience and computer experience. While the system factors that is viewed to influence success of HRIS implementation are system usage training, system support and accessibility.

Successful implementation of HRIS in this study will be treated as dependant constructs. User satisfaction and system usage will be used as the dimension to measure successful implementation of

HRIS. Thus, Figure 1 shows the conceptual framework that has been created using all information above.

Summary

Information technology acceptance is an issue that has received the attention of researcher and practitioner for over a decade. Successful investment in HRIS can lead to undesirable consequences such as financial losses and dissatisfaction among employees (Venkatesh 1999). HRIS evaluation in terms of success metrics is widely held to be important in the assessment of whether the system meets the organizational objectives or not. The system usage and user satisfaction as a measurement of success has long been an elevated perspective, though, of course, systems are developed for many more reasons than happy users. Both of the measures (system use and user satisfaction) are well accepted and mostly used as surrogate measures of IS success (Bokhari 2005). Besides, individual characteristics and system usage are used as an independent constructs to successful implementation of HRIS and it is moderated by organization size.

Application of TAM is appropriate to study the user acceptance toward the successful implementation of HRIS. TAM model has been used to study the successful implementation of HRIS. It has been found to be a strong predictor of intention to use a technology in various organizational and personal situations (Stoel & Lee 2003). It proposed that the more that a user perceived a new technology to be useful and easy to use, the stronger will be their attitudes towards the technology, and the greater will be their intention to use the technology (Davis 1993). The primary objective of this research is to examine the moderating role of organization size on the relationship between individual characteristics and system conditions on successful implementation of human resource information system (HRIS).

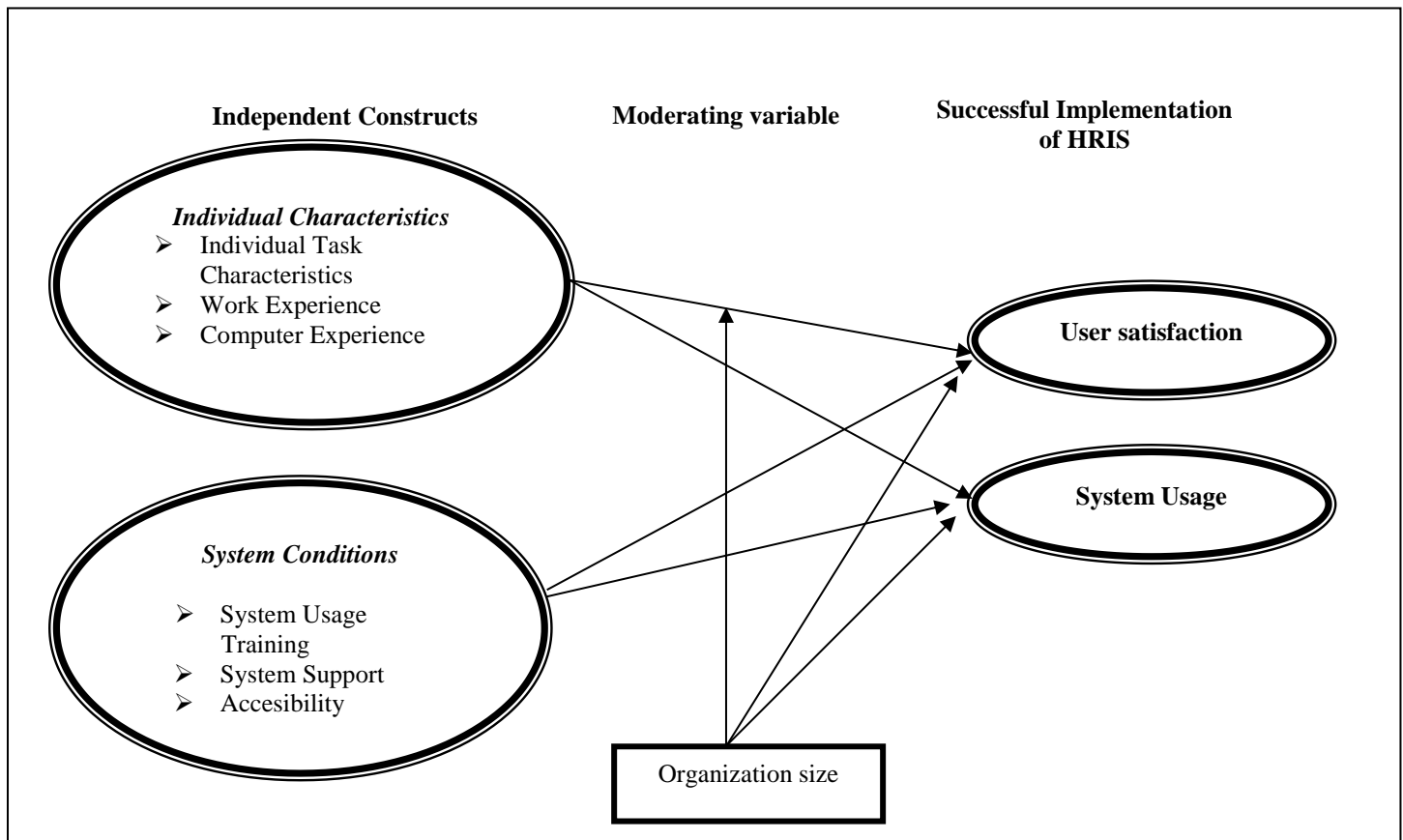


Figure 1: Proposed Conceptual Framework

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