FACTORS AFFECTING USER SATISFACTION IN BUSINESS ORGANIZATIONS AS PERCEIVED BY EMPLOYEES

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Abstract. Previous studies on user satisfaction have revealed that it is influenced by several factors, such as technological variables, organizational variables, and user characteristics. The manner in which these factors interact with one another, directly or indirectly, in influencing User Satisfaction is not understood. The most significant of these factors affecting user satisfaction is also not established. We used Structural Equation Modelling in an attempt to determine which of several exogenous variables were significant. Online and face-to-face surveys were used (n=230) from Human Resource Information System users of selected business organizations in the Philippines and Indonesia. Top management support had an indirect effect on user satisfaction through technology ease of use ($\beta = 0.773$) and user skill ($\beta = 0.165$). Organizational culture ($\beta = 0.253$), technology ease of use ($\beta = 0.490$), and user skill ($\beta = 0.165$) had a direct effect on user satisfaction.

Keywords: Technological variables, organizational variables, user characteristics, user satisfaction

INTRODUCTION

The trends in the business environment indicate that organizations are becoming technology-oriented and more knowledge-driven. As stated by Garcia (2011, p. 1) "the emergence of the new knowledge based economy has altered the way business organizations must operate and remain competitive." Meanwhile, according to Payos and Zorilla (2003), technological advances have helped to improve productivity in workplaces so that corporations can survive and cope with the competition. Some authors claim that user satisfaction can be seen when the users do their best and support the work to achieve organizational performance. Therefore, it can be argued that if the users are satisfied with the system, they may be inclined to improve their performance in the organization.

Another study of related literature seemed to suggest that the explicit and implicit organizational culture was important to user satisfaction. It also depended on the adequacy of technology provided, which keeps the business data, takes the information quickly, and generates acomplete plan to meet the business' needs (Mohapatra, 2009, p. 114). Another idea spoken of by Garcia (2011, p. 23) was that organizational culture is "a critical determinant of how its members will assimilate new ways of performing company tasks." Top management support was one of the organizational factors that was assumed to have influenced user satisfaction. Management support is important in conceptualizing the involvement and participation among top management, employees, and the

organization. It is obvious that a lack of top management support restrains the use of an improvementstrategy (Hussein, 2005). Another factor which may influence user satisfaction is technology adoption. According to Godoe and Johansen (2012, p. 1), a prime reason "to adopt a new technology [is] because it can improve the efficiency and effectiveness of various work process. "The ease of use in technology is important too, since many people with varying skill levels should know how to operate the tools in the organization. Logically, users are mainly the employees of the organization. User skills have also become one of the most important factors to an organization's success. Technology is rapidly growing and success in the competitive environment of this era means that companies must use information technology in order to effectively manage their employees also. **Statement of the Problem & Research Questions**

This study focused on factors affecting user satisfaction, such as organizational variables, consists of organizational culture and top management support, technological variables, consists of technology adoption and technology ease of use, user characteristics, consists of user knowledge and user skill, and user satisfaction as perceived by employees by using structural equation modelling (SEM). This study will specifically seek to answer the following questions:

- 1. Do organizational variables affect user satisfaction?
- 2. Do technological variables affect user satisfaction?
- 3. Do user characteristics affect user satisfaction?

Null Hypotheses

- 1. Organizational variables do not significantly affect user satisfaction.
- 2. Technological variables do not significantly affect user satisfaction.
- 3. User characteristics do not significantly affect user satisfaction.

REVIEW OF RELATED LITERATURE

In today's globalized context, employees are being considered as users who should know how to operate computers or other machines in doing their work. User satisfaction is defined as "an emotional response or affect toward an object" (Locke, as cited in Bergersen, 2004, p. 7). Logically, the main users are the employees of the organization. User satisfaction is measured by the information system effectiveness in improving decision making and productivity (Ezeala & Yusuff, 2011). Furthermore, Tessier et al. (as cited in Al-Maskari & Sanderson, 2010, p. 3) defined user satisfaction as "ultimately a state experienced inside the user's head'... and therefore was a response that 'may be both intellectual and emotional." Another statement said "It is expected that system effectiveness is correlated with user satisfaction" (Al-Maskari & Sanderson, 2010, p. 5). Other literature states that factors affecting user satisfaction are usefulness, reliability,

efficiency, personalization, flexibility, and adaptation (Bavarsad & Mennatyan, 2013). In addition, user satisfaction can also be determined by system effectiveness, user effectiveness, user effort, and user characteristics and by credentials such as user value or other document utilities, which make positive outcomes toward organizational performance (Al-Maskari & Sanderson, 2010).

User satisfaction is about what people think and feel when using a new system or product and what their attitude will be regarding their thinking. If a user is satisfied, they will give their best contribution to the organization. According to Xiao and Dasgupta (2002), user satisfaction indicates the reliability, aesthetics, usability, functionality, and appropriateness in using the system. A system's security seems to be one of the important indicators according to Franke and Hippel (2002) because security is a privacy that the company should respect, and the company should be responsible for keeping the data confidential.

Technology adoption can be defined as the way individuals or organizations choose to use new technology with new innovations (Surry & Ely, 2002). Others define technology adoption as the "decision to make full use of an innovation as the best course of action available" (Hultman, 2004, p. 2). Adoption of technology is a crucial decision for the growth, productivity, competitiveness, and evensurvival in a competitive market. However, human beings do not easily accept changes when adopting a new system. This is because it is very hard for people to leave their old practices and leave their comfort zone and enter into new innovations. In addition, the basic concept of technology adoption, according to Godoe and Johansen (2012, p. 1), is that organizations need to adopt it because it can "improve the efficiency and effectiveness of various work processes." Furthermore, the logic behind technology adoption is derived from the theory of reasoned action, which involves two-people perceptions, perceived usefulness (system enhances job performance) and perceived ease of use (Henderson & Divett, 2003). Clients could approve or disapprove of the innovation being presented to them. However, the response must be evaluated according to the needs of the organization because a new system can either hinder or help an organization.

The ease of use in technology is defined as "the degree to which person believes that using a particular system would be free of effort" (Davis, as cited in Henderson & Divett, 2003, p. 385). Since many people with varying skill levels operate tools in an organization, the ease of use in technology is important. The ease of use in technology is not the end product but the beginning of the process; however, even though the end product is the most important outcome in the organization, ease of uses should also be considered as the first step in the process (Cowen, 2009). The theory behind technology can be easily

used within and without limitation in a particular system (Kigongo, 2005). Once the users know how to use equipment, they will creatively explore the system so gaining better perceptions of it. Organizational culture, according to Garcia (2011, p. 23), is "a critical determinant of how its members will assimilate new ways of performing company tasks." In addition, culture also gives value to user behavior, contributes to the organization, reflects a corporation's fundamental beliefs about how the system should function, and contains the vision, goals, and purpose of the organization (Jaghargh, Ghorbanpanah, Nabavi, Saboordavoodian, & Farvadin, 2012; Lippert & Swiercz, 2005).In the organizational culture theory formulated by Schein's (2010) original model, it is held that "Culture exists simultaneously on three levels: On the surface are artifacts, underneath artifacts lie values, and at the core are basic assumptions" (p. 659). Those three levels give us knowledge and contributions about culture that need to be addressed in the organization. In many cases, organizational culture is related to change, so there needs to be a differentiation between the three levels of culture.

Organizational culture has been included in recent empirical studies. Measurements of the organizational culture include indicators such as "willingness to take risks, commitment to development, organizational values and procedures, employees' morale and involvement, organization entrepreneurial spirit and the like" (Ogbonna & Harris, as cited in Garcia, 2011, p. 25). Another indication of an open organizational culture is that it accepts new ideas to support the work, and supports innovation and flexibility to achieve effectiveness in the organization (Wilson-Evered & Hartel, 2009). In other words, to impact culture, the human resource (HR) leader should also work with the organization to give advice to the workers on how to have a proper way of thinking, to create a vision and mission, and to act and behave in a proper way to accept the changes that the organization has made (HR Impact on Corporate Culture, 2005). As the culture in one organization will be different from another, the supportability and the ability to discuss changes seems to be the best indicators of an ethical organizational culture (Riivari, Lamsa, Kujala, & Heiskanen, 2012). Even though the culture in each organization might be different from others, organizations still are dedicated to achieving their own organizational goals (Wilson-Evered & Hartel, 2009, p. 377).

According to Zhang and Li (2013), organizational culture plays an important role in core competency in the organization to achieve effectiveness in the working environment and satisfy the employees. A study by Aydin and Ceylan (2009), using multiple regression analysis among 578 employees of a manufacturing industry in Turkey, found that employee satisfaction has positive significant correlations with organizational culture. Two other studies—the one by Hussain and Yousaf (2011), using descriptive analysis among 200 private organizations in Pakistan, and the other by Popescu and Grigore (2007), using quantitative analysis among 500 multinational companies—found that the employees' satisfaction is significantly affected by themanagement and leadership responsibility.

Besides, management needs to socialize with the employees and communicate well the importance of how the system can help the organization (Mohapatra, 2009). Top management support is defined by Young and Jordan (2008, p. 3) "as devoting time to the (IS) program in proportion to its cost and potential, reviewing plans, following up on results and facilitating the management problems involved with integrating ICT with the management process of the business." Accordingly, top management support has become the most critical factor in the success of adoption of information systems. Support needs to be constant and consistent during the implementation process (Elbanna, 2012). The measurement of management support can be reflected through satisfaction (Hoffmann, Ineson & Stewart, 2014). Top management support is an assurance that should be given to users. Without any support from the management, the ideas, inputs, or suggestions coming from the workers will never be heard, and there will be no changes at all. Bergersen (2004) stated that top management support, organizational support, and user attitude all have important roles to provide for the basic needs of the information system resources and will affect user satisfaction. Finally, Ong et al. (2009), using factor analysis among 230 respondents of a secondary school in Hong Kong, found that management support for the information system showed a positive relationship with user satisfaction.

User skill, which is defined as the ability and capacity of individuals that comes from training, learning, and practicing to competently and consistently perform their task well (Organization for Economic Cooperation and Development, 2012), must similarly be recognized as one of the most important factors to an organization's success. Mohapatra (2009, p. 111) stated, "Managing employees effectively and properly upgrading their skills will result in increased collective performance at organizational level." In order for the employees to work effectively in the organization, they are now required to be multifunctional, empowered, and self-managed. This concept is also tacitly affirming that the HR flexibility is a dynamic part of the organization, where it is "focused on adapting employee attributes—such as knowledge, skills, and behaviors—to changing environmental conditions" (Bhattacharya, Gibson, & Doty, 2005, p.2).

User skills are related to user satisfaction. According to Al-Maskari and Sanderson (2010, p. 5), user skills consist of three components: "(i) domain expertise, (ii) system expertise and (iii) search expertise," which is related to user satisfaction. From the above discussion, the users' performance is highly dependent on their skills and user skills positively affect user satisfaction. It goes without question that if the users have good skills to operate the system, they will give their best performance to the organization.**RESEARCH METHODOLOGY** Two survey methods were chosen for this study. These involved cross sectional and a longitudinal **survey** (Fraenkel & Wallen,2006). In the cross sectional survey, the data was collected at one time from a specified sample. Relationships among the variables of the study were tested using correlation analysis. The SEM was used to determine the causal relationship between seven variables under examination, such as organizational culture, top management support, **technology adoption**, technology ease of use, user knowledge, user skill, and user satisfaction.

In this study the sample was taken from the population of business organizations comprising the manufacturing, service, and mining sectors in the Philippines and Indonesia. Only companies using HRIS for their businesses were selected because the study concerned the perceptions of employees about using HRIS. The choice of geographic location from where the companies were selected was made based on factors such as the nature of the countries, cost efficiency, access convenience, and availability of the business organizations. A saturation sampling procedure of respondents using HRIS was chosen for the online and face-to-face surveys, as it provided a representative sample of HRIS users for this study. The saturation sampling procedure is a method of sampling which involves all members of the population at one time as a sample for research (Sue & Ritter, 2012). The final data collection for this study took place over a period of three months. With the purposive and saturation sampling procedure, I distributed questionnaires through online and face-to-face surveys to 305 respondents and was able to collect 239 completed questionnaires. After cleaning the data with outliers, I was able to process 230 final data respondent. The source of the questionnaires used and their performance characteristics in a pilot study are detailed and will be commented on in the Results section. Essentially, we selected items from questionnaires used by other researchers, that possessed acceptable Cronbach alpha characteristics, for use in the pilot study.

The hypothesized relationship among the variables under investigation is according to the diagram following. {please supply your diagram and give comments on the salient features; the one given is an illustration taken from Godoe & Johansen}

Figure 1 illustrates our research model including the hypothesized relationships between the dimensions of TRI, TAM, and actual use of technology.

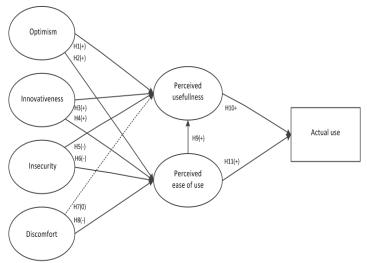


Figure 1. The integrated model (TRAM) with hypothesized relations among study variables.

RESULTS

Technology adoption did not have an effect on user satisfaction. Based on the results from the initial structural model, the null hypothesis could not be rejected (r = 0.46, p = 0.457). In the literature, the direct influence of technology adoption on user satisfaction seems to be largely unexplored. It appears that employees are not experiencing the effectiveness and efficiency that technology adoption is capable of bringing. The relationship of technology ease of use to user satisfaction was r = 0.371, p < 0.05, which means there was a positive relationship between technology ease of use and user satisfaction, so the null hypothesis was rejected. Technology ease of use had a significant direct effect on user satisfaction. This result supports the findings of a study by Ong et al. (2009), who found that technology ease of use leads to technology acceptance and higher employee performance.

User knowledge did not have a positive effect on user satisfaction. Based on the results from the initial structural model, the null hypothesis could not be rejected (r = 0.036, p = 0.767). It seems that the employees did not perform their work competently and efficiently. This is most probably due to their lack of HRIS training, seminars, and workshops on HRIS. However, if all the mentioned activities were done for the employees, one would expect enhancement of their capabilities. User skill did not have a positive effect on user satisfaction either. The results from the final structural model show a significant positive effect of user skill on user satisfaction (r = 0.165, p < 0.05). This means the null hypothesis was rejected. This result supports the findings of a prior study, where it was

found that three skills, consisting of domain, system, and search, are related to user satisfaction (Al-Maskari & Sanderson, 2010).

The relationship of organizational culture to user satisfaction data showed a significant direct positive effect (r = 0.253, p < 0.05). This meant that the null hypothesis was rejected. My finding supports those of Zhang and Li (2013), who concluded that organizational culture significantly influenced employee's (user's) satisfaction and played an important role in achieving effectiveness in the working environment and satisfying the employees.

Organizational culture did not have an effect on technology adoption or ease of use in our study. Based on the results from the initial structural model, the null hypotheses were upheld (r = 0.092, p = 0.617; r = 0.153, p = 0.298, respectively). In the literature, the effect of organizational culture and its influence on technology adoption and technology ease of use seem to be largely unexplored. It seems that the users in our study were not ready to get familiar with the technological changes and new innovation in their organization. Users are not familiar with the ease of use in adopting technology, they are unlikely to be enthusiastic about it.

Organizational culture did not have a positive effect on user knowledge or user skill. Based on the results from the initial structural model, the null hypotheses could not be rejected (r = 0.171, p = 0.186; r = -0.087, p = 0.467, respectively). In the literature, the direct influence of organizational culture on user knowledge and skill seem again to be largely unexplored. It appears that the practice in the organizations studied was to avoid providing and sharing information about new innovations in technology or encourage the employees to develop their ability and skill in facing technological changes.

Top management support did not have a positive effect on technology adoption (r = -0.058, p = 0.770). It seems that management did not give support and encouragement to its employees when adopting anew innovation in technology. Top management support did not have an effect on technology ease of use either. However, the findings of this study showed a significant, direct, and positive effect of top management support on technology usefulness (r = 0.773, p < 0.05). The results from the structural model showed a significant direct positive effect of top management support on user knowledge (r = 1.069, p < 0.05). Therefore, the null hypothesis was rejected. This result supports the findings of a study by Ellingsen (2003), where user knowledge was found to be one of the characteristics identified in high level education achievement which, when supported by the management, led to the development of a high degree of professionalism. However, top management support did not have an effect on user satisfaction in this study. Based on the results from the initial structural model, the null hypothesis could not be rejected (r = -0.048, p = 0.880). It seems that management lacked in support, commitment, and encouragement towards its employees when seeking improvements through new technology innovation.

DISCUSSION AND CONCLUTIONS

Structural equation modelling was applied using Analysis of Moment Structures version 21 in order to answer the Research Questions. The reason for using SEM was to determine the relationships between latent variables or the unobserved exogenous variables that contributed to user satisfaction. Another purpose for the use of SEM was that the relationships among the variables can be represented in a graphical diagram (Bell, Rajendran & Theiler, 2012). In a measurement model, specification involves using the observed variables and their relations with parameters to see if these are influenced by the latent variables.

Analysis and Interpretation

The purposive sampling method was used to collect data from 22 business organizations in the manufacturing, mining, and service sector in Indonesia and the Philippines. The response rate of the participants was 78.3%. This was accomplished for up to 200 of the 239 collected respondents. Therefore, the greater the numbers of HRIS users, the more participants were selected for the study, and vice versa (the number was estimated based on the HRIS users in the business organizations). The different observable indicators of latent or unobservable variables were measured in order to choose the most appropriate indicators to measure the latent variables. The Analysis of Moment Structure package was used in the analysis process.

Preliminary results derived from our pilot study on 40 employees returned satisfactory Cronbach alpha scores, indicating internal consistency (Table 1). The results obtained in our study compared well with those previously obtained. Questions chosen for use in our study were selected from lists used by authors identified in Table 1. Various items were removed from our selection following analysis of the results obtained in the pilot experiment. Removal was based on low factor loading and reliability characteristics and items were also removed if they showed high correlation values with other items in the test. Questions chosen for use in our study were selected from lists used by authors identified in Table 1. Various items were removed from our study were selected from lists used by authors identified in Table 1. Various items were removed from our selection following analysis of the results obtained in the pilot experiment. Removal was based on low factor loading and reliability characteristics and items were also removed if they showed from our selection following analysis of the results obtained in the pilot experiment. Removal was based on low factor loading and reliability characteristics and items were also removed if they showed high correlation values with other items in the test.

Table 1. Source of Questionnaires Used and the Cronbach Alpha Scores Associated with Their Use

| Questionnaire Type | Cronbach Alpha* | Reference Source for Questionnaire Items | |
|------------------------|--------------------|---|--|
| Technology adoption | 0.76 | Godoe & Johansen, 2012 | |
| Technology ease of use | 0.91 | Godoe & Johansen, 2012 | |
| Top Management Support | 0.95 | Dammen, 2001 | |
| Organizational culture | 0.87 | Revathi, 2008 | |
| User knowledge | 0.91 | Abourawi, 2008 | |
| User skill | 0.91 | Abourawi, 2008 | |
| User satisfaction | 0.96 | Lewis, 1993 | |

*Pilot study completed involving 40 employees

Table 2 gives essential characteristics about the questions chosen for our survey. All items returned a p value <0.01.

| Questionnaire Type | Questions | Loading | Reliability (r ²) |
|------------------------|-----------|-------------|-------------------------------|
| | Approved | Factor | |
| Technology adoption | 5 | 0.491-0.765 | 0.241-0.586 |
| Technology ease of use | 3 | 0.588-0.798 | 0.345-0.637 |
| Organizational culture | 6 | 0.701-0.854 | 0.492-0.730 |
| Top management support | 4 | 0.744-0.817 | 0.554-0.667 |
| User knowledge | 5 | 0.717-0.886 | 0.514-0.785 |
| User skill | 4 | 0.683-0.827 | 0.467-0.684 |
| User satisfaction | 5 | 0.749-0.841 | 0.561-0.707 |
| | | | |

Table 2. Characteristics of Questions Chosen for Use in the Various Questionnaires

Technology Adoption

The results of the analysis of the 10 items for the latent variable technology adoption showed that item ta20 had a low factor loading (< 0.35). Except for parsimony reasons of the model, other reasons to remove items from technology adoption were based

on the residual co-variance matrix and least reliability. Item ta10 was deleted first because of the least reliability. Next, items numbers ta5, ta6, ta8, and ta9 were removed because of the residual co-variance matrix and a low reliability among other indicators. In theory, items should be removed based on high correlation (above 0.70) and a residual co-variance value above/below \pm 1.96. The remaining five items (ta1, ta2, ta3, ta4, ta7) were used to measure the potential aspects of technology adoption as they possessed a satisfactory factor loading above 0.35, reliability, and *p*-value.

| Question | Factor | Reliability | <i>p</i> -value |
|----------|---------|-------------|-----------------|
| # | Loading | (r^2) | |
| ta 1 | 0.611 | 0.374 | < 0.01 |
| ta 2 | 0.544 | 0.296 | < 0.01 |
| ta 3 | 0.531 | 0.282 | < 0.01 |
| ta 4 | 0.626 | 0.392 | < 0.01 |
| ta 5 | 0.488 | 0.239 | < 0.01 |
| ta 6 | 0.455 | 0.207 | < 0.01 |
| ta 7 | 0.585 | 0.342 | < 0.01 |
| ta 8 | 0.484 | 0.234 | < 0.01 |
| | | | |
| ta 9 | 0.444 | 0.197 | < 0.01 |
| | | | |
| ta 10 | 0.275 | 0.075 | < 0.01 |
| | | | |

 Table 1 Initial Measurement Model of Technology Adoption

 Ouestion Factor Reliability p-value

Technology Ease of Use

The result of the analysis of the 10 items for the latent variable technology ease of use showed that item te12 had a low factor loading (0.247). So item te12 was removed. The remaining 9 items had satisfactory factor loadings. However, some of the items were removed based on high correlation (> 0.7) and residual co-variance (\pm 1.96). Items number te13, te14, and te15 were removed based on high correlation. Items number te18, te19, and te20 were removed because of residual covariance. Table 3 shows the 10 initial items of technology ease of use with factor loading, reliability, and *p*-value. *SEM* requires a model to be parsimonious. After the removal of the first four items from technology ease of use, the removal of the next items te19 and te20 was based on high correlation. To improve the parsimony of the model, item number te18 was removed because it was the least reliable. The three final items (te11, te16, te17) of technology ease of use had satisfactory factor loading, reliability, and *p*-value and were used.

Organizational Culture

The result of the analysis of the latent variable of organizational culture showed that Item oc25 possessed a low factor loading (0.175). It was removed. The remaining nine items had satisfactory factor loadings. However, further removal of the two items oc23 and oc24 was based on the residual co-variance matrix. The next item that was removed from the model was item oc27 based on its low reliability (0.194). The remaining six items of organizational culture (oc21, oc22, oc26, oc28, oc29, oc30) showed the potential of the organizational culture to measure the readiness and acceptance of new innovation in the business organization.

Top Management Support

The results of the analysis of the 10 items for the latent variable top management support showed that all items had satisfactory factor loadings (< 0.35). Some items were removed based on the residual covariance matrix and a high correlation between the items. Items tms31 and tms34 were removed from the list based on the residual covariance matrix and the least reliability. For parsimony reasons of the model, further removal of other items was done based on high correlation with other items. Item tms34 had a high correlation with tms35, and item tms36 had high correlation with tms37. Those four items had a high correlation with item tms38 and appeared to measure the employees' perception of management support when using HRIS. However, item tms38 seemed to have a more significant meaning in measuring employees' perception of management support. Therefore, tms34, tms35, tms36, and tsm37 were removed. Table 7 shows the 10 initial items of top management support with factor loading, reliability, and p-value. Item tms39 had a high correlation with item tms40. Both the items appear to measure the employees' commitment and well-being as given by the top management. However, item tms39 was removed, and item tms40 was retained because it seemed to be more significant in measuring employees' perception of commitment at work. The final four items of top management support (tms32, tms33, tms38, tms40) possessed satisfactory loading, reliability, with *p*-value.

User Knowledge

The results of the analysis of the 10 items for the latent variable user knowledge showed that nine of the items had satisfactory factor loadings (< 0.35). Item uk84 was removed from the model. Item uk41 and item uk42 had a high correlation and a residual covariance matrix. Item uk43 had a residual covariance matrix and low reliability. So the three items were removed from the list. Table 9 shows the initial nine items of user knowledge with factor loading, reliability, and p-value. As parsimony reasons to improve the model were needed, some items were removed based on reliability and redundancy. Item uk48 and uk49 had a high correlation with item uk50. The five items (uk45, uk46,

uk47, uk49, uk50) appeared to measure employees' perception of accessing the system at work.

User Skill

The results of the analysis of the 10 items for the latent variable user skill showed that nine out of ten items had satisfactory factor loadings (< 0.35). Item usk94 was removed from the list based on the least factor loading (0.160) and least reliability (0.025). The further removal of items was based on high correlation and the residual covariance matrix. Items number usk51, usk52, and usk53 were removed based on the residual covariance matrix and a high correlation. The items appeared to measure the same aspects of the employees' perception of skills in using HRIS at work. Therefore, the three items were removed from the model based on the redundancy of the items. For parsimony reasons of the model, some items were removed based on reliability, redundancy, high correlation, and the residual covariance matrix.

User Satisfaction

The results of the analysis of the 10 items for the latent variable user satisfaction showed that all items had satisfactory factor loadings (< 0.35). However, the removal of items was based on a high correlation with other items. Items us62 and us63 had a residual covariance matrix and also a high correlation with item us61. Both items appeared to measure employee (user) satisfaction with the completion of the job at work. However, item us61 seemed to be more significant in measuring user satisfaction with using HRIS at work. Item us69 had a high correlation with items us67 and us68. The three items appeared to measure the employees' perception of using HRIS at work. However, item us69 seemed to be more significant in measuring user satisfaction with the deployment of HRIS at work.

Implications and Conclusions

Factors such as organizational culture, technology ease of use, and user skill positive have direct relationships with user satisfaction. Organizational culture has an important role in the acceptance of new innovation and the changes which follow, and may help leaders, managers, and users in an organization to perform direct communication, organizational improvement, team work, open communication, respond to feedback, and provide staff training to make a job satisfactory through HRIS.

The management's acceptance of new innovations of the present study may help leaders, managers, employees, and users in developing organizational changes by being skilled, committed, and giving support to the organization. The support of top management in facing the changes in technology has a significant role that may help managers, employees, and users as they look for more effective and simple ways of working with technology.

Top management support directly influenced technology ease of use and user skill. This result demonstrates that the support of management towards user satisfaction is influenced by the awareness, encouragement, and concern of the management regarding the availability of technological factors and user characteristics.

Lastly, the findings of this study may expand existing knowledge by explaining how variables such as organizational culture and top management support are directly influencing user satisfaction in business organizations. This approach might help leaders, managers, academicians, practitioners, and employees in accepting the changes in innovation with the full support of the management, which will make potential users believe that user satisfaction offers numerous benefits that will enhance organizational performance, improve efficiency and effectiveness, and increase productivity.

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