APPLICATION USE OF HUMAN RESOURCE MANAGEMENT SYSTEM (HRMIS) IN THE STATE EDUCATION DEPARTMENT

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ABSTRAK

The purpose of this study was to identify the level of readiness of using the Human Resource Management Information System or HRMIS among the staff of the Terengganu State Education Department (JPNT) based on the UTAUT Model. The respondents of this study involved 97 staff members and non-teachers representing the entire TSED staff. Descriptive statistics analysis using Smart PLS Version 2.0 was used to analyze the relationships between constructs. The researcher's proposed model contributes 45% of the variance to Behavioral Intention. The findings show that only Social Influence has a significant positive relationship with Behavioral Intention. Researchers feel the urge and encouragement from the management of the Departments and Sectors play an essential role in ensuring that all TSED citizens use the HRMIS module in their service-related matters. The results of this study can also serve as a guide to the central agencies, the Ministry of Education Malaysia and the Department for developing more effective policies and actions regarding the use of the HRMIS system. The scope of the study should be extended to the school level as HRMIS is also used by the school and the District Education Office to obtain more complete and accurate results.

Kata kunci: MSC, e-Kerajaan, HRMIS, UTAUT

1.0 PENGENALAN

Seven applications have been developed: Generic Office Environment (GOE), Project Monitoring System (PMS / SPP), e-Procurement (EP), e-Services and Human Resource Management Information System (HRMIS), Electronic Labor Exchange (ELX) (currently known as JobsMalaysia) and e-Syariah. The success of these seven applications has prompted several other public service agencies to take the initiative to develop and implement e-Government systems to facilitate public engagement with their organizations. Among these applications are myGovernment portal, e-Land, e-Filing, e-Local Government (e-PBT), eJustice, Pensions Online Workflow Environment (POWER), and Training Information System (e-SILA).

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HRMIS has been developed and is currently being implemented throughout Malaysia by the Department of Public Services Malaysia. HRMIS is not simply a human resources application systems but more important is a new approach to human resource management a comprehensive and integrated approach to address the multiple barriers in public sector management. HRMIS is developed based on ten key functions of competent human resource management, namely 1. Formulation and Strategy Evaluation, 2. Development, 3. Performance Management, 4. Human Resource Acquisition, 5. Termination of Service, 6. Career Management, 7. Remuneration Management, Benefits and Rewards, 8. Personal Records Management, 9. Employment Data, 10. Employee Communication and Discipline Management. HRMIS is the 'enabler' to the process of public sector human resource management and should be fully implemented to create a National Database of Human Resource Management of Public Sector. Therefore, serious attention should be given to implementing HRMIS modules and submodules in each agency to ensure that all necessary information is kept up-to-date (Department of Public Services Malaysia).

In line with the expectations and importance of this HRMIS in the eyes of the government, certain studies need to be undertaken to ascertain the level of use of HRMIS among civil servants at all levels and agencies.

2.0 LITERATUR

Rapid changes in the information system (IS) are very influential in modern organizations (Avison and Shah, 1997; Chaffey, 2003). Many organizations use IS as a tool to improve efficiency. This is in line with the study of Edwards et al. (1995), Elliott and Starkings (1998), Renkema (2000), and Laudon and Laudon (2002) that use IS, which includes systems such as the HRIS System. Ngai and Wat (2004) presented a comprehensive literature review of the human resource information system and reported that most Hong Kong industries benefited greatly through the implementation of the HRIS System. They revealed that the size of the company might have impacted some of the benefits and obstacles encountered while implementing the HRIS System. They say that support from top management is one of the most important factors in the successful implementation of the HRIS System. In Malaysia Norshidah (2008) studied the internal consumer assessment of six application systems, e-services, e-procurement, Generic Office environment (GOE), Human resource management information system (HRMIS), Project monitoring system (PMS) and Electronic labour exchange (ELX). Given the limited research on HRMIS, researchers hope this study will add to the literature on HRMIS surveillance and acceptance among government officials. Researchers use the UTAUT model adopted in the education world to measure the level of technology acceptance among consumers.
Venkatesh (2003) introduced seven constructs in the UTAUT model based on the above eight theories. Nonetheless, the results of the research and studies carried out on the original theory, it is believed that the four constructs that play an essential role in identifying or measuring behavioural intention (BI) and Use Behavior (UB) are Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC). Besides, four moderators were included: gender, age, willingness and experience (Venkatesh et al., 2003).

Performance expectancy: The extent to which individuals believe that the use of technology will lead to performance gains. This can also be seen as technology adoption.

Effort expectancy: The ease of use of technology.

Social influence: The extent to which individuals believe that others are important to themselves that they need to use technology.

Facilitating conditions: It is clear that organizational and technical infrastructure needed to support technology exists.

There are many researchers who have adopted the UTAUT model in their research. Although they viewed, different findings may be due to demographic factors of respondents or objectives of the study itself. The study of Venkatesh et al., (2003), Sedana and Wijaya (2009) found that there was a significant positive relationship between Performance Expectancy and Behavioral Intention. This finding is consistent with the findings by Basuki & Dian (2011) found that factors that influence attitudes to adopt e-learning are Performance Expectancy (PE) in which the user wishes to use e-learning can produce a more optimal work. In contrast to the findings by Marchewka et al. (2007) it was concluded that there was no significant relationship with Behavioral Intention. Basuki & Dian (2011) conclude that Effort Expectancy (EE) constructs also influence the attitude of consumers to the extent that they feel comfortable using the system. However, in contrast to findings by Dasgupta, et al., (2007), Marchewka et al., (2007) and Sedana and Wijaya (2009) who found their study results show that Effort Expectancy does not affect Behavioral Intention. Lim Bee Lee (2005), in her study, found that Social Influence variables play an important role in determining Behavioral Intention in email usage.

Maizatul et al., (2011) stated that the factors influencing the use of technology are the people's perception of the extent to which these innovations are beneficial to them, easy to use, reliable, self-efficacy and an environment conducive to the use of changes such as adequate infrastructure. Based on the literature review, the researcher lists several hypotheses to solve.

Maizatul et al., (2011) menyatakan bahawa faktor yang mempengaruhi penggunaan teknologi ialah persepsi rakyat tentang sejauh mana inovasi tersebut berfaedah kepada
mereka, mudah digunakan, boleh dipercayai, mempunyai efikasi diri dan suasana yang mendorong kepada penggunaan inovasi seperti infrastruktur yang mencukupi. Berdasarkan tinjauan literatur penyelidik menyenaraikan beberapa hipotesis untuk diselesaikan.

The Study Hypothesis is as follows:

Performance Expectancy has a significant positive relationship with Behavioral Intention.
Effort Expectancy has a significant positive relationship with Behavioral Intention.
Social Influence has a significant positive relationship with Behavioral Intention.
Facilitating Conditions have a significant positive relationship with Behavioral Intention.

Figure 1.0 shows the conceptual framework of this study.

![Conceptual Framework](image)
3.0 METHODOLOGY

This study is a quantitative study using a questionnaire form. The study was conducted on the support and support staff of the Terengganu State Education Department. The entire population of the NRD includes 436 staff and support staff. For the purpose of this study, 130 respondents were randomly selected to be sampled. However, out of these, only 97 forms were successfully collected and analyzed. For the purpose of conducting this study, the researchers adopted the UTAUT model developed by Venkatesh et al., (2003) with slight modifications to suit the time period. In this study, a questionnaire was developed using Google Drive and emailed to 130 respondents comprising Terengganu State Department of Education officials and support staff. Researchers used the seven-point (1-7) quantitative Likert scale, where number 1 was defined as 'strongly disagree' while number 7 was defined as 'strongly agree'.

The five constructs used in this study were Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioral Intention. All of these constructs are derived from the UTAUT model developed by Venkatesh et al., (2003). Of these constructs, 19 questions were used. Time constraints cause researchers to choose to conduct research online. The questionnaire was emailed to the respondents. The researcher used Statistical Packages for Social Sciences (SPSS) software to perform analysis for respondents' demographics such as gender data, occupational status and age to see frequency, percentage and mean. The analysis of the study data for all five constructs is using SmartPLS M2 Version 2.0 software which is a software that can be used to analyze Structural Equation Modeling (SEM).

4.0 Results

The respondents of this study were 97 staff from the Terengganu State Education Department including Management and Professional positions as well as Members of the Implementing Group. Frequency and percentage descriptive statistical analyzes were used to describe respondents' profiles by gender, occupational group and age of the respondents. All of this information is reported in Table 1.0
Table 1.0: Respondent’s Profile

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>65</td>
<td>67.01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>32</td>
<td>32.99</td>
</tr>
<tr>
<td>Position Group</td>
<td>Management and Professionals</td>
<td>42</td>
<td>43.30</td>
</tr>
<tr>
<td></td>
<td>Members of the Implementing Group</td>
<td>55</td>
<td>56.70</td>
</tr>
<tr>
<td>Age</td>
<td>It's been 30 years</td>
<td>25</td>
<td>25.77</td>
</tr>
<tr>
<td></td>
<td>30-40 years old</td>
<td>34</td>
<td>35.05</td>
</tr>
<tr>
<td></td>
<td>41-50 years old</td>
<td>28</td>
<td>28.85</td>
</tr>
<tr>
<td></td>
<td>50 years and above</td>
<td>10</td>
<td>10.31</td>
</tr>
</tbody>
</table>

4.1 Construct realism

An instrument of study is said to have high internal consistency values when the Cronbach Alpha reliability value is greater than 0.8 and not less than 0.6 (Chin, 2010; Henseler et al., 2009; Nunnally & Bernstein, 1994). In this study, the researcher dropped three items, namely PE4, FC3 and FC4, as the questions were repeated and measured in the same construct. The findings of this study showed that five constructs studied had an appraisal value greater than 0.8, while one construct had alpha values greater than 0.7. Detailed analysis of the results is shown in table 2.0 below.

Table 2.0: Construct reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Expectancy (PE)</td>
<td>0.946</td>
</tr>
<tr>
<td>Effort Expectancy (EE)</td>
<td>0.910</td>
</tr>
<tr>
<td>Social Influence (SI)</td>
<td>0.864</td>
</tr>
<tr>
<td>Facilitating Conditions (FC)</td>
<td>0.841</td>
</tr>
<tr>
<td>Behavioural Intention (BI)</td>
<td>0.953</td>
</tr>
</tbody>
</table>

Table 3.0: Measurement model – AVE, CR
All constructs have been tested and found to have acceptable levels of validity (Venkatesh et al., 2003). Nonetheless, researchers are gaining validation through concurrent validity, and discriminant validity as the questionnaire instrument used has been modified according to the focus of the study and the researcher wants to ensure that the question is able to measure the construct.

The analysis results (Table 3) show that all AVE values exceed 0.5, which implies that all items have acceptable convergent reliability according to Fornell and Larcker (1981). The Composite Validity (CR) for all items ranged from 0.8 - 0.9 and was considered to be capable of measuring study items. This is based on the statement by Hair et al. (2006) where the CR value should be greater than 0.7 - 0.9 for Cross Loading to be significant.

Discriminant validity is a measure that does not reflect other variables. Fornell and Larcker (1981) stated that when the mean square root of the variance extracted exceeds the correlation value between all variables, the discriminant validity is formed. In table
4.0 below, the blackened AVE value is the discriminant validity value which is greater than the other construct value below it.

Table 4.0: Discriminatory Validity Matrix

<table>
<thead>
<tr>
<th></th>
<th>PE</th>
<th>EE</th>
<th>SI</th>
<th>FC</th>
<th>BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>0.950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>0.669</td>
<td>0.886</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>0.457</td>
<td>0.654</td>
<td>0.844</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>0.599</td>
<td>0.787</td>
<td>0.545</td>
<td>0.929</td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>0.474</td>
<td>0.660</td>
<td>0.633</td>
<td>0.651</td>
<td>0.956</td>
</tr>
</tbody>
</table>

4.4 Testing the proposed model

Testing the inner model is performed by looking at the R-square that tests the goodness-fit model. The results show that R-Square values are 0.454. This suggests that the researcher's proposed model contributes 45% to Behavioral Intention.

Subsequent analyzes were performed to test the significance of the independent variables' effect on the dependent variables by looking at the statistical significance of t-values and parameter coefficient values. The results showed that Performance Expectation (β = 0.004, p > 0.01) had no significant positive relationship with Behavioral Intention. Therefore H1 is rejected. Analysis of Effort Expectancy (β = 0.187, p > 0.01) showed that EE was not significantly associated with Behavioral Intention. Therefore H2 is rejected. Social Intention (β = 0.335, p <0.01) had a significant relationship with Behavioral Intention. Therefore, H3 is acceptable. The findings of the analysis on Facilitating Conditions (β = 0.318, p > 0.01) showed no significant relationship toward Behavioral Intention. Therefore, H4 is rejected. Table 5.0 below shows in detail the relationship of each variable.

Table 5.0: Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Coefficient (β)</th>
<th>t-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>PE → BI</td>
<td>0.004</td>
<td>0.044</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2</td>
<td>EE → BI</td>
<td>0.187</td>
<td>1.194</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
Overall, the results obtained $R^2 = 0.545$, indicating that the model contributes 54% of the variance in Behavioral Intention is weak as the $R^2$ value is less than 0.59 per cent. If the value of $R^2 = 0.59 - 0.80$ is moderate and greater than 0.80 is large.

**5.0 DISCUSSION AND CONCLUSION**

The results of the analysis showed that there was a positive but not significant correlation between Performance Expectancy and Behavioral Intention. This is due to the HRMIS feature that the system serves only as an information centre based on the services of the civil service and not as a source of knowledge in the form of training or guidelines. This finding is not the same as Venkatesh et al. (2003) that Performance Expectancy has a significant relationship with Behavioral Intention. Therefore, Hypothesis 1 was rejected because there was no significant relationship despite positive ratings.

The results showed that there was a positive but not significant correlation between Effort Expectancy and Behavioral Intention. The factor-oriented study of this non-
significant relationship is that HRMIS is a complex system and users need to have in-depth knowledge of service aspects which is also a complex matter of regulatory requirements. This finding is in line with the findings of Sedana and Wijaya (2010) but for the opposite reason since respondents have prior knowledge make it easier for respondents to use LMS so that aspect is not a factor in attitude change. Therefore, Hypothesis 2 was rejected because there was no significant relationship despite positive ratings.

The analysis results show that there is a positive and significant correlation between Social Influence and Behavioral Intention. This happened due to the efforts undertaken by the Ministry of Education and the Department in introducing HRMIS to all citizens, especially the Department of Education. Updating the data in HRMIS has been made the Key Performance Indicator for the Chief Secretary to the Ministry of Finance. In addition, respondents also used HRMIS especially the Personal Records module which stores personal information such as family information so that they can get treatment at the government medical center free of charge without requiring the department's certification form. This is in line with findings from Sedana and Wijaya (2009) and Basuki and Anubhakti (2011) who stated that Social Influence is positively related to Behavior Intention. Hypothesis 3 is accepted because there is a significant and positively correlated relationship.

Based on the analysis performed there is a positive but not significant correlation between Facilitating Conditions and Behavioral Intention. This may be due to accessibility issues with HRMIS. Equipment such as computers and internet connectivity is available and usable, but the problem is that the problem of accessing the system is long and repetitive when it fails. These constraints create negative perceptions and make it difficult to change attitudes. This is not in line with the findings of Dasgupta et al. (2007) but in line with the findings of Venkatesh et al. (2003) that Facilitating Conditions had no significant effect on Behavioral Intention. Hypothesis 4 is rejected because there is no significant relationship despite positive ratings.

This study contributes to the increasing variety of findings for testing using the UTAUT model. An increase in the validity of the instrument cited by Venkatesh et al. (2003) will also occur following repeated and multi-dimensional validity testing. The Ministry of Education (MOE) and the Department can use the findings of the study to identify the level of acceptance of the organization's citizens to HRMIS as a whole. Improvement measures can be taken and preferably focus on the most significant and strong weaknesses in preventing organizational change or acceptance of HRMIS.

The Central Agency, which is the Public Service Department as the HRMIS coordinator, can get information based on the system's perception of things that need to be improved. As an example of experience, extensive skills and knowledge are needed
to understand the aspects of service and how HRMIS can be simplified. Good access is also important to consider.

The researcher suggests some improvements to the research that has been carried out. The scope of the study should be extended to the school level as HRMIS is also used by the school and the District Education Office. The expansion of the study was able to increase the number of respondents to ensure that the findings of the study reflected the entire state. Increasing numbers of respondents will increase the validity of the study findings.

In addition, future studies can use a variety of methods and not only depend on the questionnaire form. Interview method is a method that can be used to explore the real perceptions and issues that respondents have.

Future researchers are also expected to include constructive attitudes and motivations in their studies. In addition, the elements of erator mode can also be included by looking at the gender or age relationships of all constructs in the study model. Based on the findings obtained, available only Social Influence who has a significant relationship with Behavioral Intention. It is therefore recommended that further studies be carried out by incorporating suggestions for improvement to increase the level of reliability of the findings and compare the findings with previous studies.

Overall, this study provides an overview of the degree of change and factors that contribute to increasing organizational acceptance of HRMIS. The analysis was conducted on data obtained using the software SmartPLS shows that only constructs Social Influence only having a significant relationship with Behavioral Intention. In this regard, management should take more effective steps to encourage, support and encourage all department members to adopt and cultivate the use of HRMIS for all support staff and staff.

RUJUKAN


