The Use of I-Staff Portal among Non Academic Staff in Public University in Malaysia

Nur Shafini Mohd Said  
Faculty of Business Management, Department of Applied Management  
Universiti Teknologi Mara (UiTM) Kuala Terengganu  
21080 Kuala Terengganu  
Terengganu, Malaysia

Siti Rapidah Omar Ali  
Faculty of Business Management, Department of Applied Management  
Universiti Teknologi Mara (UiTM) Terengganu  
23000 Dungun, Terengganu, Malaysia

Farah Ahlami Mansor  
Faculty of Business Management, Department of Applied Management  
Universiti Teknologi Mara (UiTM) Kuala Terengganu  
21080 Kuala Terengganu  
Terengganu, Malaysia

Abstract

In this computer era, I-Staff Portal becomes the most essential part in distributing, storing, and retrieving human resource information. It helps organizations to optimize the value of information for easy accessible and usable for any and all organizations purposes. However, many employees are ready for digital machines but not for the systems. Employees were resistance to change because of feeling fear of not being well-equipped with skills and experience to do job properly using new tools. Thus, this study attempted to examine the relationship between perceived usefulness and perceived ease of use towards the usage of I-Staff Portal among non academic staff in UiTM Terengganu. This study applies stratified random sampling. A total of 201 questionnaires were distributed to the non academic staff in Universiti Teknologi MARA, Terengganu. Pearson Product-Moment Correlation Coefficient and multiple regression were used to identify the relationship of perceived usefulness and perceived ease of use on intentions to use. The findings showed that all two dimensions towards the usage of I-Staff Portal have a relationship with behavioral intentions to use I-Staff Portal among non academic staff. Thus, the findings confirm the hypothesis 1 that there is a positive relationship between usefulness and intentions to use. The findings also confirm the hypothesis 2 that there is a positive relationship between usefulness and intentions to use. It is important to the management of UiTM to provide adequate infrastructure and services such as user friendly application and stable network connectivity as the success of I-Staff Portal depends on the intention and commitment to use the system.

Keywords: Perceived usefulness, perceived ease of use, I-Staff Portal

1. Introduction

Electronic technology has not only changed the office environment and jobs, but the changes are also beginning to appear in the way we think about and use information. Ceeney (2007) claims that, the digital revolution fundamentally change how we live and work. There is a growing understanding of how businesses should be operated using IT to achieve effectiveness in the operation. Word processing, spreadsheet, and email application have become the standard office software used to organize documents. Apart from that, Universiti Teknologi MARA (UiTM) Terengganu has also digitized some of their HR processes through the use of I-Staff portal. I-Staff Portal can serve the same function with the Human Resource Management Information Systems (HRMIS) to UiTM.
According to Pusat Sistem Maklumat Bersepadu UiTM Shah Alam (2007), I-Staff portal has been developed for the convenience of all staff to access personal particulars which is held in STARS system. I-Staff Portal can provide a great deal of services such as management of personnel records, HR planning, annual leave application, allowance, compensation and salary information, training and development information, health and safety information, and industrial relations. Through the Internet connection, UiTM staff can access a range of internal and external information from their desktops and notebooks. Adoption of I-Staff Portal can improve the efficiency of operations and productivity of staff in the UiTM itself.

Therefore, this study aims to focus on the relationship between perceived usefulness and perceived ease of use towards the usage I-Staff Portal among non academic staff in UiTM Terengganu. Two hypotheses have been formulated in this study:

Hₐ₁ There is a positive relationship between perceived usefulness and intentions to use.
Hₐ₂ There is a positive relationship between perceived ease of use and intentions to use.

2. Literature Review

The Functions of I-Staff Portal

I-Staff Portal can serve the same function with the Human Resource Management Information Systems (HRMIS) for UiTM. The new technology in I-Staff Portal changes the way employees are managed. According to Masrek (2009), HRMIS is an integrated, technology-enabled human resource management information system for the Malaysian Public Service. Human resource management in the organization must work faster, be more accurate, and be more productive. According to Stone (2006), HRMIS has become a critical tool for integrating HR information into the organization’s business strategy and for demonstrating the positive contribution that HR can make to the bottom line through the more effective and efficient management of the organization’s human resources.

I-Staff Portal is much more than a computerized record of employee information. According to Stone (2006), the system is an integrated approach to acquiring, storing, analyzing, and controlling the flow of HR information throughout the organization. Reddick (2009) claims that, HRMIS help employees using self-service functionality of the web for HR information and/or services can easily update and verify information, consult online lists of internal job vacancies, access government employees handbooks and receive notices about upcoming training sessions. Other than that, Reddick (2009) further stated that, manager can analyze job candidate profiles online, construct salary models, view benefits programs, monitor employee absentee trends, and retrieve government labor regulations and forms for compliance.

Technology Acceptance Model (TAM)

TAM model is a well known information system literature. According to McKechnie, Winklhofer, and Ennew (2006), TAM is originally developed by Davis (1986) to predict user acceptance of computer technology in the workplace, has the advantage of being well grounded in established social psychology theory. According to Ndubisi (2003), TAM theorizes that external variables influence behavioral intention to use and actual usage of technologies, indirectly, through their influence on perceived usefulness and perceived ease of use.

![TAM Model](image)

Figure 1: TAM Model (Davis, 1986)
The Perceived Usefulness of I-Staff Portal

Davis (1989) defines the perceived as the degree to which a person believes that using a particular system would enhance his job performance. This perception can vary between users and I-Staff Portal studied. Perceived usefulness measures can be influenced by prior attitudes with I-Staff Portal as well. If a user found their prior experience with I-Staff Portal to be beneficial, then it can be argued that the same user would find I-Staff Portal in general to be beneficial and useful as an information tool within organizations or vice versa.

The Perceived Ease of Use of I-Staff Portal

According to Davis (1989), the perceived ease of use is defined as the degree to which a person believes that using a particular system would be free of effort. Based on this definition, it can be expected that the external factor of user experience could correlate with this construct since experience tends to bring about familiarity (Paul, 2004). With regards to I-Staff Portal, the user’s perceived ease of use levels can be studied by conducting on the end users to know whether they perceived that using the system is free from effort. This in turn will derive the attitude and behavior intention of a person towards using the I-Staff Portal. Perceived ease of use has been found to influence usefulness, attitude, intention, and actual use (Gardner & Amoroso, 2004). According to Yong, Jae, and Jaeki (2009) perceived ease of use is the user’s assessment that the system will be easy to use and require little effort. Extensive research over the past decade provides evidence of the significant effect perceived ease of use has on usage intention, whether affecting perceived usefulness directly or not (Agarwal & Prasad, 1999; Davis 1989; Venkatesh, 1999, 2000; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000). In order to prevent the “under-used” system problem, I-Staff Portal must be both easy to learn and easy to use.

3. Methodology

This correlational type of study assessed relationship between perceived usefulness and perceived ease of use towards the usage of I-Staff Portal among non academic staff in UiTM Terengganu. Stratified random technique was applied in this study. For the purpose of collecting data, self-delivered and e-mail approaches have been used. A total of 201 questionnaires were distributed to the non academic staff working in UiTM Terengganu with the return rate of 87.5%. The questionnaire has four different sections including demographic section which focuses on items such as age, gender, working experiences, highest level of education, and departments where they worked in. Section B was focused on the perceived usefulness towards using I-Staff Portal. Section C was discovered on the perceived ease of use towards the usage of I-Staff Portal. Section D was discovered on the intentions to use I-Staff Portal. The questionnaire in Section B, C, and D was instructed in five point Likert-scale format, which were 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The data collected were analyzed using the Statistical Packages for Social Science (SPSS), version 17.0. The study used both descriptive and inferential statistics. The descriptive statistics include mean and frequency. The inferential statistics include Pearson Product-Moment Correlation Coefficient and Multiple Regression analysis.

4. Findings and discussion

The study aimed to examine the factors which influence the intentions to use I-Staff Portal through the two variables namely Perceived Usefulness and Perceived Ease of use.

The descriptive statistic for respondent profiles indicated that out of 201 respondents, most of them were female (57.4%) and 42.6% male participated in this study. Most of them, were from the age group of 22-29 years old (43.8%), followed by 28.4% in the age group of 30-39 years old and only 27.8% in the age group of more than 40 years old. In the context of the respondents experience at the workplace, it was found that 33% of them had and experience of between 1-5 years, 13.1% with and experience of 6-10 years, and 11.9% with an experience 16-20 years. Another 19.9% hand an experience of less than 1 year as compared to 11.9% with an experience 11-15 years. Only a minority of them, that is, 10.2 % had an experience of more than 21 years. Most of the respondents, 36.9% of them had a SPM and SRP/PMR qualification as compared to 34.1% with a diploma, 19.3 % with a Bachelor Degree However, only 9.7% of the respondents had STPM. The study indicated that 35.8% of the respondents working in the administration department. Another 11.4% of the respondents working in academic affairs department followed by 10.2% working in bursary department and only 9.7% working in facility management department.
However, only 18.8% of the respondents working in students affairs department and only 14.2% of them working in library department. Most of the respondents which are 60.8% of them working in UiTM Dungun campus as compared to 39.2% of the respondents working in UiTM Kuala Terengganu campus.

Pearson Product-Moment Correlation Coefficient was used to assess the relationship among variables (independent and dependent variables). As can be seen from the Table I, the correlation analysis shows the perceived ease of use (Section C) formed the highest Pearson Correlation analysis with r=0.726, indicating that this variable has positive correlation with the intentions to use. Besides that, there is also large correlation between perceived ease of use and behavioral intentions to use (Cohen, 1988). This correlation value can be interpreted as there is a high correlation between perceived ease of use and behavioral intentions to use (Guilford, 1956).

Other than that, the perceived usefulness which represented in Section B indicating the positive correlation with the intentions to use with r=0.724. This correlation value can be interpreted as there is a high correlate on between perceived usefulness and behavioral intentions to use (Guilford, 1956). Besides that, there is also large correlation between perceived usefulness and behavioral intentions to use (Cohen, 1988). High and large correlation between perceived usefulness and intentions to use can be assumed that perceived usefulness will make respondents more agree with the usefulness of I-Staff Portal and they are aware on the benefits of I-Staff Portal.

Table 1: Correlation Analysis (n=176)

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived Usefulness</td>
<td>4.24</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Perceived Ease of Use</td>
<td>4.21</td>
<td>.51</td>
<td>.732**</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Intentions to Use</td>
<td>4.31</td>
<td>.47</td>
<td>.724**</td>
<td>.726**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 1 also shows the result indicating that independent variables are statistically significant with the p-value of 0.000 at 0.01 significant levels. Based on the finding, the result indicates that all the variables have positive correlation respectively when referred to strength association. In testing the hypothesis 1 and 2, a regression analysis (multiple regression) was performed with perceived usefulness and perceived ease of use as the independent variables and intentions to use as the dependent variable. To strengthen the evidences, the researcher has analyzed the value of R, R-square, and Durbin and Watson where it indicates the level of influences the independent variables towards dependent variable. The R-value for the variables is 0.779. It also demonstrated that the value R-square is 0.607. It can be concluded that perceived usefulness and perceived ease of use influence the intentions to use at 60.7%.

According to Durbin and Watson (1950), the Durbin–Watson statistic is a test statistic used to detect the presence of autocorrelation in the residuals from a regression analysis. The values below 2 represent positive serial correlation among the errors and values above 2 represent negative serial correlation (Galt, 2004). Thus, the finding indicates the Durbin-Watson statistic with 1.592 which represents the positive serial correlation.

Table 3: Regression Analysis (multiple regression) (n=176)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Beta</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-Perceived Usefulness</td>
<td>.416</td>
<td>.5954**</td>
</tr>
<tr>
<td>ii- Perceived Ease of Use</td>
<td>.421</td>
<td>.6030**</td>
</tr>
<tr>
<td>r^2</td>
<td>.779</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.592</td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01
Table 3 shows the summary of multiple regression analysis among all the independent variables towards behavioral intentions to use as dependent variables. Among all the independent variables, Perceived Ease of Use (Section C) indicates the highest contribution towards dependent variables with t-value of 0.603 and beta score 0.421, followed by Perceived Usefulness (Section B) that indicates t-value 0.5954 and beta score 0.416.

Thus, the findings confirm the hypothesis 1 that there is a positive relationship of usefulness and intentions to use. The findings also confirm the hypothesis 2 that there is a positive relationship of perceived ease of use and intentions to use.

**Conclusion**

This study investigated the factors that influence intentions to use I-Staff Portal among Non Academic Staff in UiTM Terengganu through the two variables (perceived usefulness and perceived ease of use) of TAM framework developed by Davis (1986). The findings generally supported the hypothesis derived from the model as well as earlier empirical studies. Regression analysis was conducted to test the proposed hypotheses. Based on the findings, the perceived usefulness and perceived ease of use was found to be significant drivers of intentions to use the I-Staff Portal. This finding is consistent with previous studies on TAM (Chan & Lu, 2004). Consistent with TAM, the analysis results revealed that the perceived usefulness and perceived ease of use of I-Staff Portal directly enhanced the level of non academic staff intention to use I-Staff Portal.

Perceived ease of use was the strongest predictor of intentions to use the I-Staff Portal. The influence of perceived ease of use on intentions to use I-Staff Portal was strong. This supports TAM (1986) which asserts the easier a system is to use, the more useful it can be. High and large correlation between perceived usefulness and perceived ease of use towards the intentions to use can be assumed that non academic staff of UiTM Terengganu has noticed that I-Staff Portal is benefited and easy to use in performing their job and task.

The findings also supported by other studies that perceived usefulness positively influences behavioral intention to use IT system. (Luarn & Lin, 2005; Wu & Wang, 2005). There are extensive evidences proving the significance of effect of perceived usefulness on adaptation intention (Chen & Barnes, 2007; Guriting & Ndubisi, 2006). Hence, developing I-Staff Portal that are easy to use will enhance the usefulness of the portal and indirectly increase the intentions to use the portal.

**Recommendation**

A number of recommendations can be identified.

The perceived usefulness and perceived ease of use are considered as the most significant factor in this study. Therefore, the management of UiTM should continue developing the portal which possessed competitive advantages such as the cost advantage and differentiation advantage over the traditional way of services and publicize these advantage to the staff.

Apart from that, non academic staff should eliminate negative perceptions towards the usage of I-Staff Portal and improve their adaptations in order to catch competitive environment strengths as to keep abreast with the latest technology. Besides, the management of UiTM should conduct a lot of training to enhance the non academic staff skills. The obstacle for them to achieve the desired result is less training. The management should also put highly attention to reluctant staff by motivating them about the usefulness of I-Staff Portal. Training on the usage of I-Staff Portal is important to make the respondents more multi-skilled in using the system. The management should give information that will capture the imagination of staff towards the usage of I-Staff Portal. By doing this, it will increase their awareness as well as educate them about the usage of I-Staff Portal.

The management of UiTM also needs to design a user-friendly system on I-Staff Portal to have a very direct and clear link between improved performance or productivity and what the non academic staff can earn. Supervisor should ask staff to help set outcomes and expectations towards the usage of I-Staff Portal. Each department should place one expert or well-trained person to assist and educate the staff in using I-Staff Portal. This probably would assist the employees towards a clear direction. Moreover, the management of UiTM should give continuous support to the staff in terms of funding, motivation, time, and infrastructure such as providing enough equipment and facilities when the staff wanted to apply their understanding towards the I-Staff Portal.
The management encouraged to show their strong commitment and belief towards the usage of I-Staff Portal first before they can convey to their staff. The management should increase the safety and security of the I-Staff Portal system, especially virus prevention. It can convince and increase the staff confidence about the usefulness of I-Staff Portal. In practice, there is a need for the management of UiTM to understand the non academic staff perceptions and factors influencing the intention to use I-Staff Portal in order to increase the non academic staff behavioral intentions to use the system and maintain better I-Staff Portal.

Several suggestions or recommendations have been made if a study of this nature is to be carried out in the future. This type of study can be expanded to different UiTM campuses, for the purpose of making comparison as it is generally known that the usage of I-Staff Portal is implemented in all UiTM campuses. Besides that, the respondents of this study can also focus on other positions, such as academic staff as they implement I-Staff Portal in the workplace. This future research can also include other variable in TAM model such as attitudes towards using the I-Staff Portal. Attitudes towards using the I-Staff Portal can be used to explain the intentions to use the I-Staff Portal. In order to further strengthen and validate the findings of the study, interviews need to be carried out in addition to the distribution of the questionnaire.

References