Acceptance level of e-campus among students at private institutions in Malaysia

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Abstract. The use of information technology will not only be used by business entities for profit, but also by higher learning institutions. A lot of money has been spent by the government to provide IT facilities. However, there are still users who do not make full use of the technologies available. This is going to make the government suffer losses. Accordingly, this research will explore the acceptance of e-campus technology among university students. The analysis would use a quantitative approach to address the research questions. The results indicate that the level of e-campus usage is high. Managerial implications for this study are discussed.

1. Introduction

Information system technology has been widely used to promote teaching and learning in classrooms and it has been increasingly leveraged to support teaching and learning in classrooms [1]. In the traditional classroom context, time and space restrict the interaction between students and teachers. Eventually, the adoption of the internet in education has entirely re-structured the learning and training model [2]. According to [3] the high demand for e-learning content, especially the multimedia element, requires rapid storage growth and dynamic concurrence requirements, which are not sufficient to meet conventional e-learning methods. In this study, we aim to explore the level of e-campus acceptance among private higher institution students in order to better understand the extent to which they accept such technology.
2. Literature review

The literature on the adoption of information technology studies has a number of theories that can be used to determine the successful implementation of information technology projects. TAM [4], UTAUT [5], De Lone & Mc Lean[6], Diffusion of Innovations Theory [7] and many more are among the various theories used by researchers. Although there are many models that can be used to predict the success of the implementation of the information technology infrastructure, fundamental issues such as the current level of use of the information technology infrastructure are often overlooked. Based on the technology adoption literature, the study was divided into two phases, namely the initial phase of adoption and the continuous phase of adoption using classic technology acceptance theory such as TAM, De Lone & Mc Lean and others. While post-acceptance studies typically use ECM(expectation confirmation model) [8] as a backbone theory. The difference between these two is the dependent variable where the first dependent variable known as intention to use and the latter known as continuance intention to use

2.1 Intention to use

Studies in the "intention to use" phase are more on the propensity or motivation of certain people to use certain technologies. There are various research contexts that use dependent variables "intention to use" such as study by [9] which attempt to determine factors contributes to the acceptance of mobile banking using the technology acceptance model (TAM). The study by[10]aims to understand the behavioural characteristics of consumers in the sharing economy as well as examines factors affecting guest satisfaction with a peer-to-peer accommodation (P2P) and their plan to use it again for potential trips. Another study by[11] looked at the impact of m-payment system characteristics and user-centric factors on m-payment usage across different types of mobile payment users. Apart from the aforementioned studies, there are other studies which use the same dependent variable such as study by [12] in e government acceptance, [13] e-participation, [14] educational video games, [15] smart homes, [16] mobile payment, [17] block chain based technology, [18] mobile learning, [19] sports wearable technology and [20] service robots in tourism

2.2 Continuance intention

Research on "continuance intention" begins with the theory of ECM. This study has shown that the intention to continue to use technology is influenced by consumer satisfaction. The study claimed that individual users of a specific technology must first be satisfied with the technology before agreeing to continue to use it [8]. There are also other studies that further extend the studies initiated by [8], such as study by [21] that aims to investigates the interrelationships between technological predictors and behavioural mediators in explaining users’ continuance intention for online tax filing. Another study by [22] extend the original continuance theory by focusing the role of hope in the formation of continuance intention. Meanwhile, study by [23] has proposes a theoretical model that integrates the technology-organization-environment framework, institutional theory, diffusion-of-innovation theory and the opportunity-risk framework to analyse the drivers of SaaS use and its continuance intention

3. Methodology

A 21-item questionnaire was created for this analysis, and a multi-item Likert scale was applied in accordance with established literature in the field of information systems, a multi-item Likert scale was applied. The variables were measured using the 5-point Likert Scale, with 5 being 'Strongly Agree' and 1 being 'Strongly Disagree'. To ensure the content validity of the instrument, all research instruments have been extracted from the literature. Items extracted from the literature were first reviewed and modified to fit into the context of the study. The instrument was translated into Malay to ensure that respondents fully understand the questionnaire items. The translation is necessary in order to avoid the
possibility of confusion that eventually would harm the validity and reliability of the item. The population consisted of 1700 students conveniently selected with the help from student affairs personnel.

4. Data analysis

An examination of the participants’ views on the key construct for the study, which is continuance intention. Together, a total of 3 items were used as indicators for this construct. As can be seen in Table 1, out of the 3 indicators measuring continuance intention, the item no 2 “Maybe I will continue to use e-Campus in the future” was rated the highest indicator by the respondents (Mean = 3.77, Standard Deviation [SD] = 0.90) whilst the indicator “If possible, I would like to continue to use the e-Campus system in my future dealings with my university” had the least score (Mean = 3.65, SD = 1.00). Overall mean and standard deviation score of the 3 indicators was (Mean = 3.72, SD = 1.00). The results are presented in Table 2 indicates that the level of continuance intention is high.

Table 1. mean and standard deviation of the scale

| No | Items                                                                 | M   | SD  | Overall score |
|----|-----------------------------------------------------------------------|-----|-----|---------------|
| 1  | If possible, I would like to continue to use the e-Campus system in my future dealings with my university | 3.65| 1.00|               |
| 2  | Maybe I will continue to use e-Campus in the future.                   | 3.77| 0.90| 3.72          |
| 3  | I expect to continue using e-Campus in the future                      | 3.74| 0.93| 3.72          |

Table 2. level of continuance intention

| Mean score | Level interpretation | Construct (continuance intention) |
|------------|----------------------|-----------------------------------|
| 0.0 to 1.66| Low                  |                                    |
| 1.67 to 3.33| Medium               | Mean = 3.72, SD = 1.00            |
| 3.34 to 5.00| High                 |                                    |

As can be seen in Table 3, item no 1 “If possible, I would like to continue to use the e-Campus system in my future dealings with my university” has a total of 133 voters for the “agree” scale which is the highest. Item no 2 “maybe I will continue to use e-Campus in the future” has a total of 142 voters for the “agree” scale which is the highest and item no 3 “I expect to continue using e-Campus in the future” has a total of 123 voters for the “agree” scale which is the highest
Table 3. descriptive statistics for item 1

| Item 1                                                                 | Scale          | Frequency | Percent |
|-----------------------------------------------------------------------|----------------|-----------|---------|
| If possible, I would like to continue to use the e-Campus system in my future dealings with my university | Strongly disagree | 11        | 3.5     |
|                                                                      | disagree       | 23        | 7.3     |
|                                                                      | neutral        | 96        | 30.5    |
|                                                                      | agree          | 119       | 37.8    |
|                                                                      | Strongly agree | 66        | 21.0    |
|                                                                      | Total          | 315       | 100.0   |

Table 4. descriptive statistics for item 2

| Item 2                                                                 | Scale          | Frequency | Percent |
|-----------------------------------------------------------------------|----------------|-----------|---------|
| Maybe I will continue to use e-Campus in the future.                   | Strongly disagree | 7         | 2.2     |
|                                                                      | disagree       | 14        | 4.4     |
|                                                                      | neutral        | 88        | 27.9    |
|                                                                      | agree          | 142       | 45.1    |
|                                                                      | Strongly agree | 64        | 20.3    |
|                                                                      | Total          | 315       | 100.0   |

Table 5. descriptive statistics for item 3

| Item 3                                                                 | Scale          | Frequency | Percent |
|-----------------------------------------------------------------------|----------------|-----------|---------|
| I expect to continue using e-Campus in the future                      | Strongly disagree | 9         | 2.9     |
|                                                                      | disagree       | 11        | 3.5     |
|                                                                      | neutral        | 102       | 32.4    |
|                                                                      | agree          | 123       | 39.0    |
|                                                                      | Strongly agree | 70        | 22.2    |
|                                                                      | Total          | 315       | 100.0   |

5. Discussion

Current research is aimed to explore the level of e-campus acceptance among private higher institution students in order to better understand the extent to which they accept such technology. A descriptive analysis was conducted to determine the degree of continuity of e-campus acceptance in order to meet the objectives of the study. The degree of continuance acceptance of the e-campus among students is high. This study also proved that the study sample fully embraced the implementation of the university's e-campus. This continuous acceptance may be due to certain factors that can be studied in future studies. This continuous acceptance is not short-term, but it takes a while before students are fully satisfied with the system and finally accept the system on an ongoing basis. Total acceptance is important, because if the adoption of a technology has not been maximum, then technology infrastructure delivery may fail. This failure is to be avoided because a huge investment has been made to subsidize the development of
the infrastructure as well as the facts that acquisition of new customers will cost up to five times more than maintaining current customers [8]. [8] supports this view, which writes that 5% increase in customer retention in the insurance industry typically translates into 18% savings in operating costs. Such trends underscore the importance, relevance, and timeliness of studying IS continuance as a topic of organizational interest.

6. Conclusion

This study has several limitations. The main limitation is that the data are obtained only at one university and will not be able to provide a comprehensive picture of the continued acceptance of this system by other universities. This study only examines the level of acceptance of the system and does not examine the factors contributing to it. The next study should examine the factors which contribute to the continued acceptance of the system in a wider context.

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