Exploring Uum Student Participation in Service Learning Based on Easiness Factor under Technology Acceptance Model (TAM)

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Abstract: Many universities were implement service learning (e-learning) for various reasons. It is obvious that the number of e-learning opportunities provided by higher educational institutes continues to grow in our country, Malaysia. There is still little research has been done to explore the process of how university students participate and use e-learning. The general structural model, technology acceptance model (TAM) were used which focus on the one variable, perceived ease of use. The result proved TAM to be a good theoretical tool to help student understanding the system, due to its easiness in using and participation in the service learning.

Key words: e-learning - Technology Acceptance Model (TAM) - Perceived ease of use

INTRODUCTION

Service Learning: Universities have valuable resources (e.g. students, faculty, staff, classrooms, libraries, technology, research expertise) that become accessible to the community when partnerships address community needs. They also have a tradition of serving their communities by strengthening the economic development of the region, addressing educational and health needs of the community and contributing to the cultural life of the community [1].

Service-learning is a pedagogy that aims to strengthen student academic learning by integrating community-based and classroom learning [2]. A recent trend in higher education has been to set up e-learning systems that provide students with online access and learning content.

Service learning allows student to make connections between what is learned in the classroom and the real world; it enables students to learn about phenomena in their subtlety and complexity [3]. Researchers such as [2] have documented the connection between service learning and student learning, but what is needed in the current assessment climate are additional studies that explore the connection between attainment of specific learning outcomes and service learning.

Besides, service-learning is consistent with other current trends in higher education including an emphasis on student learning rather than teaching; interdisciplinary work; identity of colleges/universities as communities of learners in partnership with civic society [4] and the scholarship of application, integration and service [5]. Service learning shares responsibility for student learning with teachers and students themselves.

Technology Acceptance Model (TAM): A number of theoretical models explain behavioral intentions as well as future behavior, example, the Theory of Reasoned Action (TRA) [6] the Theory of Planned Behavior (TPB) [6] and the Technology Acceptance Model (TAM) [7]. As the starting point in our theory development we will use the TAM, which was developed to explain individual acceptance of information technology.

TAM provides a basis with which on the traces how external variable influence belief, attitude and intention to use. Two cognitive beliefs are posited by TAM: perceived usefulness and perceived ease of use. According to TAM, one’s actual use of a technology system is influenced directly or indirectly by the user’s behavioral intentions, attitude, perceived usefulness of the system and perceived ease of the system.

TAM also proposes that external factors affect intention and actual use through mediated effects on perceived usefulness and perceived ease of use. Figure 1 depicts the original TAM [7].

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Diagram 1: Technology Acceptance Model.

**Literature Review**

**Service Learning:** According to [2], result in participation in service learning, when students taking a course with service-learning are more likely to gain a broader understanding of the course content than students experiencing classroom instruction alone.

Students have reported greater academic challenge and had a greater intention to persist. Service-learning had its greatest influence on intention to persist through its relationship with academic challenges and engaging course content [8].

Besides that, service-learning appears to have an impact upon student’s intention to persist through its ability to create faculty interactions and encourage positive academic experiences [9]. Service-learning can enhance the educational experience for students by creating a seamless education environment where students connect the content of their learning with their lecturers.

Furthermore, [10] said the service-learning has a positive effect on student personal development such as sense of personal efficacy, personal identity, spiritual growth and moral development and also on interpersonal development and the ability to work well with others, leadership and communication skills.

**Perceived Ease of Use:** TAM appears to be able to account for 40 per cent to 50 per cent of user acceptance [11]. Perceived Ease of Use is the degree to which a person believes that using a particular system would be free from effort [7].

[12] Found that Perceived Ease of Use influenced student intention to use internet-based learning indirectly through Perceived Usefulness and Perceived Enjoyment. [13] Also identified perceived ease of use and perceived usefulness as the key factors for adoption of e-learning.

[14] Found that Perceived Ease of Use has a significant effect on students’ attitudes and Perceived Usefulness simultaneously. Intentions to use an information system fully mediate the effect of other variables on the actual use of the system [15].

The easier it is for a user to interact with a system, the more likely he or she will find it useful [16]. [17] has concluded that the model fit the collected data and that the usefulness and ease of use turned out to be good determinants of the acceptance and use of a course website as an effective and efficient learning technology.

Meanwhile perceived ease of use is defined as the extension to which one believes using service learning (e-learning) will be free of the cognitive effort [18].

Focused on understanding the antecedents of the perceived ease of use. They concluded that computer self-efficacy acts as a determinant of perceived ease of use both before and after hands-on use and that the objective usability was found to be a determinant of ease of use only after direct experience with a system.

**MATERIALS AND METHODS**

The study is quantitative in nature and employs an questionnaire survey for data collection which involved students at a medium-size with 210 students from 3 faculty, there are, College of Art & Science, College of Business and College of Law, Government & International Studies at University Utara Malaysia.

The research instrument consists of two main sections. The first section incorporates a nominal scale to identify respondents’ demographic information. The second section uses 5-point Likert response scale where 1: Strongly disagree, 2: disagree, 3: Neutral, 4: agree and 5: Strongly agree. The measured items include perceived ease of use (5 items). The Statistical Package for Social Sciences (SPSS) version 20 for Windows was used to generate descriptive statistics.

**RESULTS AND DISCUSSION**

The percentage of respondents were 31.0% for male and female is 69.0%. About 94.3% is single and the 5.7% are from students that are married and mostly the married students are PHD respondents.

It was recorded that most of the respondents, 62.9% are students from age 25 years old below, this because, most of them are familiar with the systems. 31.9 % are in the age of 26 – 35 years old, 4.8% for age 36 – 45 years old and 0.5% for age 46 and above.
Table 1: Profile of respondents

<table>
<thead>
<tr>
<th>Respondent Profile</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>31.0</td>
</tr>
<tr>
<td>Female</td>
<td>145</td>
<td>69.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>12</td>
<td>5.7</td>
</tr>
<tr>
<td>Single</td>
<td>198</td>
<td>94.3</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25 years old</td>
<td>132</td>
<td>62.9</td>
</tr>
<tr>
<td>26 – 35 years old</td>
<td>67</td>
<td>31.9</td>
</tr>
<tr>
<td>36 – 45 years old</td>
<td>10</td>
<td>4.8</td>
</tr>
<tr>
<td>Above 46 years old</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year Degree</td>
<td>67</td>
<td>31.9</td>
</tr>
<tr>
<td>2nd Years Degree</td>
<td>44</td>
<td>21.0</td>
</tr>
<tr>
<td>3rd Years Degree</td>
<td>48</td>
<td>22.9</td>
</tr>
<tr>
<td>Master</td>
<td>49</td>
<td>23.3</td>
</tr>
<tr>
<td>PHD</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College of Art &amp; Science</td>
<td>76</td>
<td>36.2</td>
</tr>
<tr>
<td>College of Business</td>
<td>94</td>
<td>44.8</td>
</tr>
<tr>
<td>College of Law, Government &amp; International Studies</td>
<td>40</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics on easiness participation and using service learning

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that participate in service learning will would be easy for me to understand the subject more details.</td>
<td>210</td>
<td>3.6333</td>
<td>0.62165</td>
</tr>
<tr>
<td>I feel that my interaction with service learning would be clear and understandable</td>
<td>210</td>
<td>3.6381</td>
<td>0.64331</td>
</tr>
<tr>
<td>I feel that it would be easy to become skillful and understanding when participation in service learning.</td>
<td>210</td>
<td>3.6524</td>
<td>0.71090</td>
</tr>
<tr>
<td>I would say that, participation in service learning are flexible to interact with.</td>
<td>210</td>
<td>3.6524</td>
<td>0.59352</td>
</tr>
<tr>
<td>It would be easy for my future when participation in service learning</td>
<td>210</td>
<td>3.6333</td>
<td>0.61390</td>
</tr>
</tbody>
</table>

Thus, The level of education also play the main role in participation in the system; their percentage are in average level, 1st year degree is 31.9%, 2nd years degree is 21.0%, 3rd years degree is 48% and Master is 23.3% and lastly, PHD is 1.0%.

Meanwhile, 36.2% respondents were from College of Art & Science, 44.8% from College of Business and 19.0% from College of Law, Government & International Studies.

Table 2 had indicated both the mean and standard deviations of easiness in student participation in service learning. The ranking of importance as suggested by [19] and [20] were used as a reference in determining the level of the perceived ease of use. The authors suggest the following four categories based on rank of importance: mean value of 2.59 and below is indicating as less important, mean value between 2.60 to 3.40 is indicated as moderate importance, mean value ranging from 3.41 to 4.20 is indicated as high importance and mean value of 4.21 and above is indicating as great importance.

Hence, based on the findings, all the 5 items; I feel that participate in service learning will would be easy for me to understand the subject more details, I feel that my interaction with service learning would be clear and understandable, I feel that it would be easy to become skilful and understanding when participation in service learning, I would say that, participation in service learning are flexible to interact with, were in the range 3.41 – 4.20 that are highly important. These means that, the easiness of using service learning are in moderate range (neutral).

Besides that, the variability of the rating exhibited to be relatively high with the standard deviation range of 0.594 to 0.710, suggesting some inconsistencies on easiness participation the service learning.

Subsequently, judging from the score, which showed that, a strong mean concentration, probably may be assumed that, easiness in using or participate in service learning will help student to be more skilful and flexible to interact with their friends and lecturers.

CONCLUSION

Generally, in this study the original TAM were used in order to measure the easiness of participation and using service learning. Therefore, this study confirms the empirical evidence and findings based on TAM. Further, the study successfully confirms the applicability of TAM in the students participation in service learning that are specifically focus on the perceived ease of use.

The results provide important issues to be considered to ensure increased use of service learning systems by the students. Based on the study results, we
would offer the following recommendations to increase student’s perceptions that the technical system is easy to use by give them some talk on easiness using the systems and how useful the systems towards their educations.

Besides, the faculty also may provide them a training to make them become more skillful in using the systems. This may leads, to create the identity and characteristics of the students, that’s, when are outside, they know how to operate and participate in using the systems. Furthermore, although students might potentially be more experienced with computers, but, the teacher’s own competences with computers and e-learning technologies that are important and these enable him or her to provide students with appropriate assistance in operating the specific e-learning technology.

Furthermore, both the social and institutional environment is important for the acceptance of e-learning technologies: first, the social interaction in learning groups indeed reveals knowledge gaps and problems of comprehension while simultaneously providing instrumental and emotional support [21].

It has been consistently found that Learners Working in Groups are able to solve problems (such as how to operate an e-learning technology) more effectively and efficiently, since different views towards a subject can be discussed. This also results in a deeper understanding of the learning material [22].

Hence, Working in Groups can prevent the emergence of learning frustration and increase the learning enjoyment as well as the Perceived Ease of Use.

Second, it is important that students have access to an IT-infrastructure that fulfills the necessary hardware and software requirements to operate the e-learning technologies in question.

Little operational reliability and long transmission times due to slow processors, low main memory and other problems that’s may lead to students become frustrations and, hence, to negative emotions towards e-learning technologies [23]. Also, an otherwise easy to use system might appear to be hard to operate due to constrained hardware and software resources.

REFERENCES