Employee Perception Towards Information System Portal for Lecturers

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ABSTRACT
The study aims to identify the perception of users towards the Lecturer Information System Portal at TATI University College. A model of the lecturer portal system success, consisting of four success measures namely system quality, information quality, user satisfaction, and system success is presented and validated. A questionnaire is distributed to lecturers at four academic faculties and results are statistically analyzed using descriptive frequencies, reliability, and multiple regressions. Results revealed a positive impact of all factors investigated namely system quality and user satisfaction; information quality and user satisfaction; and user satisfaction and success.

1.0 INTRODUCTION
Web Portal, also known as Links Page, presents information from diverse sources in a unified way. It is a specially designed website that collects information from diverse sources, like calendars and to-do-list, online forums, announcements, and search engines, and presents them in a uniform way, usually in a single interface. Web portals are popular among organizations for a variety of reasons including its capability to offer user-specific, customized views.

University's web portal offers specific content based on user roles. These roles help in determining user’s privileges for reading, searching, and updating content. Channels make it easy to locate information of interest by categorizing content. As its stakeholders range from students to state government, TATIUC web portal is an important service, consolidating the needs of the diverse stakeholders on a single platform. One of the components in this portal is the Lecturer Portal.

LP is a service where academic staff manage information related to their works and student affairs. This study is motivated by use of the LP at TATIUC since it offers limited modules. Due to the importance of LP to TATIUC, the perception of users in using this portal is an interesting area to be explored. Not only the results would reveal the portal’s utilization, but also the extent it promotes an efficient work process.

As such, this study aims to evaluate the level of user acceptance of the LP using the Technology Acceptance Model, focusing on system quality, information quality, user satisfaction and system success.

2.0 LITERATURE REVIEW
Lecture Portal
Lecturer Portal can be regarded as a specific type of enterprise portal. Prior to web portals, web-based intranet was a popular tool for building workforce commitment. Although it has benefited the organizations, web-based intranets lack personalization, has poor navigation, and provided little access to
information, leading to the loss in productivity. To overcome these problems, business organizations began to implement employee portals. The role of an LP has become crucial in many organizations especially higher learning institution.

**Lecture Portal Success**

Although the demand for specific measures for assessing the benefits of IS investments are acknowledged, there is a lack of universally accepted framework to promote IS success. Technology Acceptance Model (TAM) is regarded the most robust and influential in explaining Information Technology and IS perceptions.

The success of the TATIUC lecturer portal is evaluated using the following four factors:

- **a)** System quality – Focus on performance characteristics of the system and assessed through user-friendliness, stability, security, and responsiveness.
- **b)** Information quality - Focus on the output of the system and assessed through accuracy, precision, currency, timeliness, reliability, completeness, conciseness, format, and relevance.
- **c)** User Satisfaction – Focus on the experience of using the system usually regarding a specific experience and the affective attitude of users who interact directly with the system.
- **d)** Portal Success – Focus on user satisfaction when using the system.

### 3.0 METHODOLOGY

#### Study Tool

Questionnaire was selected as the tool in this study to test the relationships of the four factors in the TATIUC IS model. A five-point Likert-scale was used to represent the responses, ranging from 1 (strongly disagree) to 5 (strongly agree).

#### Sampling

A total of 150 lecturers from four academic faculties namely the Faculty of Computer, Media & Technology Management, Faculty of Chemical Engineering, Faculty of Manufacturing Engineering Technology, and Faculty of Electric and Automation Engineering Technology at TATIUC were selected as respondents in this study.

#### Data Collection

A total of 150 questionnaires were distributed with a response rate of 45.4%. This rate is acceptable based on [16], where the sample size is stipulated to be between 21% - 23% of the population.

The questionnaire was divided into three sections:

- **(a)** Section A: Personal Information
  This section solicits demographic information of the respondents including age, gender, race, educational level, faculty, and others.

- **(b)** Section B: Portal Usage
  This section solicits information regarding usage pattern when accessing the portal, focusing on information such as frequency, purpose, and others.

- **(c)** Section C: User Acceptance
  This section solicits information for determining the level of user acceptance for the portal. Information sought includes the system quality, information quality, user satisfaction, and portal success.

#### Assessment of variables

Perceptual measures were used to capture data on IS success and technological factors. Constructs in the questionnaire were based on DeLone & McLean’s IS success model [11].

#### Hypotheses

H1: There is significant statistical effect evidence between the system quality of lecturer portal and user satisfaction.
H2: There is significant statistical effect evidence between the information quality of lecturer portal and user satisfaction.

H3: There is significant statistical effect evidence between the user satisfaction and lecturer portal success.

Figure 1. TATIUC LP System Success Model

Results of the survey were loaded into the Statistical Package for Social Sciences (SPSS) version 22 for analysis. Assessments were conducted to test the reliability and validity of the measurements used. Descriptive statistics, frequencies, correlations, and multiple regressions were used in analyzing the data.

4.0 RESULTS AND DISCUSSION

Cronbach’s Alpha Coefficient was used to test the reliability of the questionnaire (Table 1). Results indicate that it is a valid measurement instrument for TAM based on [17].

Table 1: Cronbach's Alpha Coefficient Reliability Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Quality</td>
<td>6</td>
<td>0.783</td>
</tr>
<tr>
<td>Information Quality</td>
<td>10</td>
<td>0.953</td>
</tr>
<tr>
<td>User Satisfaction</td>
<td>4</td>
<td>0.930</td>
</tr>
</tbody>
</table>

The reliability coefficients of all three variables were above 0.70, which is considered highly reliable based on [18]. Since the results shows a range higher than 0.7, it can be concluded that the questionnaire is a reliable measurement instrument.

Demographic profile of the respondent is presented in Table 2.

Table 2: Demographics Profile of Respondents

<table>
<thead>
<tr>
<th>Measure</th>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>23</td>
<td>35.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>45</td>
<td>64.6</td>
</tr>
<tr>
<td>Age</td>
<td>Below 25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>40</td>
<td>61.5</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>20</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Above 55</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Diploma</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>10</td>
<td>15.4</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>48</td>
<td>73.8</td>
</tr>
<tr>
<td></td>
<td>PHD</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>Faculty</td>
<td>FCMT</td>
<td>20</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>FCET</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>FMET</td>
<td>35</td>
<td>53.8</td>
</tr>
<tr>
<td></td>
<td>FEAT</td>
<td>7</td>
<td>10.8</td>
</tr>
</tbody>
</table>
Based on the results (Tables 3 and 4), it is proven that: There is significant statistical evidence between system quality and user satisfaction. The main purpose of using the LP are OBE (86.2%), scheduling (73.8%), student management (76.9%) and mentee management (44.6%). Results also indicate that the LP is generally variables on dependent variables; and to test the associative relationships as used by [19]. Based on the results (Tables 3 and 4), it is proven that:

- There is significant statistical evidence between system quality and user satisfaction.
- There is significant statistical evidence between information quality portal and user satisfaction.
- There is significant statistical evidence between user satisfaction and portal success.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Beta</th>
<th>R Square</th>
<th>Sig</th>
<th>F</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Quality</td>
<td>0.122</td>
<td>0.792</td>
<td>0.000</td>
<td>117.775</td>
<td>Accept</td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.811</td>
<td>0.792</td>
<td>0.000</td>
<td>117.115</td>
<td>Accept</td>
</tr>
<tr>
<td>User Satisfaction</td>
<td>0.74</td>
<td>0.548</td>
<td>0.000</td>
<td>76.352</td>
<td>Accept</td>
</tr>
</tbody>
</table>

This study has shed light to the use of the LP at TATIUC. Results revealed that system quality and information quality have significant effects on LP system satisfaction.

<table>
<thead>
<tr>
<th>Information Quality</th>
<th>System Quality</th>
<th>Satisfaction</th>
<th>Acceptance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.312</td>
<td>3.320</td>
<td>3.502</td>
</tr>
</tbody>
</table>

Table 4 illustrates the mean scores for each acceptance level. The mean scores are classified into three categories according to the level of user acceptance namely Negative, Neutral and Positive. Results revealed that the acceptance level of the LP has a positive value.

5.0 CONCLUSION

Results of this study indicate that there is general level of acceptance for "system quality" and "information quality". In addition, results also suggested that there is a high association between "information quality" and "user satisfaction", concurring with other studies that the quality of information is crucial in general information systems such as [22]. Future work in this area include the assessment of computer self-efficacy and competency using alternative analysis and factors including usefulness, ease of use, process, and services quality.
REFERENCES


