Behavioural intention to use accounting application: perceived ease of use as mediating variable

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ABSTRACT

This study investigates the role of perceived ease of use as an intervening variable between two external factors from the technology acceptance model (TAM) and Accounting application (MYOB) usage intention. This paper broadened TAM by enhancing external factors: performance expectancy and effort expectancy. Seventy-nine accounting students responded in this study. Employing Structural Equation Model (SEM-pls) concludes that perceived ease of use fully intercedes the connection between effort expectancy and MYOB usage intention. Besides, perceived ease of use also intervenes the association between performance expectancy and intention to use MYOB accounting application. However, the type of mediation is complimentary mediation. The practical and theoretical implication is discussing in this paper.

Keywords: Performance Expectancy, Effort Expectancy, Behavioural Intention, Perceived Ease of Use

1. INTRODUCTION

The current development in technology and information application greatly addresses individual professionals, such as lawyers, and physicians (Chau and Hu, 2001), including the accountant. Accounting students must be delivered computer-based accounting information systems to triumph in their careers (Apostolou et al., 2014). Stanley and Edwards (2005) suggest that the accounting students are entailed to have strong, practical skills, such as computer-based accounting information system. Information and technology applications, such as accounting information systems produce accounting information. Information is one of the critical resources of an organization. Accounting information produced by accounting information systems is very important for business and managerial decisions (Abduljalill and Zainnudin, 2015). Information about net income and asset produced via an accounting information system which based on the computer is critical to evaluating profitability.

The accounting information system's role is also useful for the internal control system (Sajadi et al., 2008). Furthermore, the Accounting Information Systems (AIS) have been considered critical enablers to attain sustainable competitive advantage (Ali et al., 2012). Therefore, a computer-based accounting information system has been delivered to accounting students. Several computer-based accounting information systems have been taught to Indonesia's accounting students, such as Accurate, Zahir Accounting, Dac Easy
Accounting, and Mind Your Own Business (MYOB) (Rajasa and Faturachman, 2015). Most of the accounting departments of private universities in Padang use MYOB application for computer-based accounting information system applications for computer accounting subjects. It is normally introduced in the fifth semester. However, the usage level of this applications post subject introduction is still low. It became a research question of why students have a low intention to use this accounting application.

Previous studies on the usage intention of the technology apply the expectancy of effort and expectancy of performance as independent variables (Aoun et al., 2010; Arif et al., 2018; Attuquaye and Addo, 2014). Rajasa and Faturachman (2015) investigate the association of computer anxiety, perceived usefulness, ease of use perception, and perceived enjoyment with an intention to re-use the Accurate (accounting application). Therefore, (Sriwidharmayani and Syahrul, 2012) also assess the accounting software acceptance among accounting student derived from the Model of Technology Acceptance. The lack of the previous study investigating the role of ease of use perception as a mediating variable between external variables (from TAM) and intention to use MYOB application. Besides, a study investigating ease perception of use as an intervening variable is also limited.

Further, there is an inconclusive result regarding the effect of external factors and intention to use the accounting application. As a consequence, the current paper explores the role of ease perception of use as an intervening or mediating variable between external factors (performance and effort expectancy) and intention to use MYOB accounting application. The paper is divided into four parts. The first part discusses the study’s introduction—the second part explains the review of the literature. The next section is material and method. Further, the following section is about results and discussion. Finally, it is closed by conclusion and recommendation.

2. REVIEW OF LITERATURE

Several theories explain the technology adoption behaviour among individuals or students concerning computer-based accounting information system adoption behaviour, like the model of technology acceptance (Davis, 1989). Hence, technology acceptance among individuals depends on the perceived usefulness of the technology and the ease perception of use. If an individual perceived that technology is helpful and easy to use, they would accept the technology. Following the plan behaviour perspective (Ajzen, 1991), technology designation behaviour is specified by an intention to use it. Further, the technology's usage intention is associated with perceived behavioural control, attitude, and subjective norm (Ajzen, 1991).

The research framework is demonstrated in Fig. 1. Performance expectancy is a perception of whether software usage will help them attain a higher performance of the job (Venkatesh et al., 2003). If they notice that the software increases their job outcome, they will intend to use that software. Meanwhile, the stage of ease regarding the use of the software is a definition of effort expectancy (Venkatesh and Davis, 2000). Another word, Effort expectancy, is clarified as the extend of ease associated with using the systems (Venkatesh et al., 2003). Suppose an individual perceives that the software is easy to use.
They tend to have the intention to use that software. There are several definitions of the perceived ease of use offered by literature. The most cited definition is the extent to which one accepts that employing a specific application will be free of charge (Davis, 1989). Previous research recommends that perceived ease of use could mediate the association between individual factors (e.g. self-efficacy, and expectancy) and intention to use (Cheng, 2011). Thus, the hypotheses are developed based on theory and previous research.

H1: Performance expectancy influences an intention to use through perceived ease of use

H2: Effort expectancy affects an intention to use through perceived ease of use

![Fig. 1. Framework]

3. MATERIAL AND METHOD

Accounting students who have taken computer accounting in the Accounting Department of Universitas Putra Indonesia “YTPK” are a research object of this study. Seventy-eight students participated in this research. The key data is collected through the online survey. The variable type consists of three latent variables: latent dependent variable (use intention), the latent independent variable (performance and effort expectancy) and mediating variable (ease perception of use). Intention to use has three items that were developed by (Fishbein and Ajzen, 1975). Besides, performance expectancy consists of three developed items (Venkatesh et al., 2003).

Meanwhile, the effort expectancy is represented by three items proposed by (Venkatesh and Davis, 2000). Finally, ease perception of use has four items used by (Brezavšček et al., 2014). SEM-PLS is utilized to analyse the primary data (Chin, 1998). In this case, smart-pls 3.2.7 is used. There are two evaluations in smart-pls: outer and inner model assessments (Hair et al., 2017).

4. RESULT AND DISCUSSION

Seventy-nine accounting students participated in filling the questioners. Table 1 demonstrates the respondent demographic data. Out of seventy-nine respondents, 84% are women, and the other is men (15.19%). Based on age, the respondents are dominated by the age of twenty-one to twenty-two years (54.43%), and the rest is nineteen to twenty years old (41.77%) and twenty-three to twenty-four years old (3.80%). The respondents are dominated by semester 4th to 6th (83.54%), and the rest is 7th to 9th semester (15.19%). Further, the respondent’s CGPA is nominated by CGPA of 3.01 to 3.50 (58.23%).
Table 1. Profile of Respondent

<table>
<thead>
<tr>
<th>Data of Demographic</th>
<th>Group</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>67</td>
<td>84.81</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>12</td>
<td>15.19</td>
</tr>
<tr>
<td></td>
<td>19 till 20</td>
<td>33</td>
<td>41.77</td>
</tr>
<tr>
<td>Age</td>
<td>21 till 22</td>
<td>43</td>
<td>54.43</td>
</tr>
<tr>
<td></td>
<td>23 till 24</td>
<td>3</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td>4th to 6th</td>
<td>66</td>
<td>83.54</td>
</tr>
<tr>
<td>Semester</td>
<td>7th to 9th</td>
<td>12</td>
<td>15.19</td>
</tr>
<tr>
<td></td>
<td>not answer</td>
<td>1</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>2.50 to 3.00</td>
<td>10</td>
<td>12.66</td>
</tr>
<tr>
<td></td>
<td>3.01 to 3.50</td>
<td>46</td>
<td>58.23</td>
</tr>
<tr>
<td></td>
<td>3.51 to 4.00</td>
<td>21</td>
<td>26.58</td>
</tr>
<tr>
<td></td>
<td>not answer</td>
<td>2</td>
<td>2.53</td>
</tr>
</tbody>
</table>

Result of the valuation of the outer model is exhibited in Fig. 1. First assessment in the outer model is convergent validity (composite reliability, average variance extracted, outer loading, and Cronbach’s Alpha). The result of outer loading indicates that all constructs own outer loading greater than 0.700, except for construct effort expectancy (only two valid items: ee2 and ee3), it runs again, and the outer loading finally reaches the requirement, >0.700 (Hulland, 1999). composite reliability and Cronbach’s alpha for all constructs also achieve the minimum value (0.700) (Bagozzi & Yi, 1988). The last indicator to see the convergent validity is the average variance extracted (AVE), and the result points out that all constructs have AVE above 0.500 (Bagozzi & Yi, 1988).

![Fig. 2. Outer model](image)

The second assessment for the outer model is discriminant validity. In this case, the Fornell-Lacker criterion is used to see the discriminant validity (Wong, 2013). The result indicates that all constructs achieve the Fornell-Lacker criterion due to the square root of the construct’s AVE is greater than the particular construct correlation coefficient. For example, square root of perceived ease of use’s AVE is 0.855, and this value is larger than PEU correlation with effort expectancy (0.779), intention to use (0.666) and performance expectancy (0.569).
The second assessment has had a robust outer model, an inner model assessment—this assessment for hypothesis testing. In the inner model, predictive relevance (R square) and predictive power (R square) must be satisfied first. The result of predictive relevance show (see Table 2) that all endogenous constructs have large predictive relevance (Henseler et al., 2009). Besides, the predictive power for all endogenous constructs possesses moderate predictive power (Chin, 1998).

**Table 2. Predictive Relevance and Power of Inner Model**

<table>
<thead>
<tr>
<th>Endogenous construct</th>
<th>R²</th>
<th>Conclusion</th>
<th>Q²</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural intention</td>
<td>0.386</td>
<td>moderate</td>
<td>0.519</td>
<td>large</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>0.417</td>
<td>moderate</td>
<td>0.625</td>
<td>large</td>
</tr>
</tbody>
</table>

As addressed in the previous session, this study investigates the role of ease perception of the MYOB accounting application between effort expectancy and intention to use, performance expectancy, and intention to use. Table 3 provides us with a result of the mediation effect assessment. To assess the mediation role of PEU, we use the procedure introduced by (Zhao et al., 2010). Also, Zhao et al., (2010) argue that only one requirement to establish mediation is an indirect effect (a x b) is significant. As seen in Table 3, both hypotheses are accepted. However, the role is full-mediation for (effort expectancy -> perceived ease of use -> behavioural intention) and complimentary mediation (performance expectancy -> perceived ease of use -> behavioural intention).

**Table 3. Assessment of Mediation Effect**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Indirect effect</th>
<th>Direct effect</th>
<th>Direction</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effort expectancy -&gt; perceived</td>
<td>(0.341)0.005***</td>
<td>(-0.04)0.807</td>
<td>different</td>
<td>full mediation</td>
</tr>
<tr>
<td>Ease of use -&gt; behavioural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance expectancy -&gt; Perceived ease of use -&gt; Behavioural intention</td>
<td>(0.087)0.094*</td>
<td>(0.342)0.000***</td>
<td>same</td>
<td>complimentary mediation</td>
</tr>
</tbody>
</table>

Notes: *, **, and *** indicate significant at 10%, 5% and 1%.

This study is the first study investigating the mediation role of perceived ease of use between effort expectancy and usage intention of MYOB accounting application. Previous studies on technology adoption (but not accounting application adoption) only focus on
the direct relationship between effort expectancy and intention to use (Attuquayefio and Addo, 2014) (Aoun et al., 2010). Besides, the direct association between perceived ease of use and behavioural intention to use accounting software (but not MYOB) has also been documented by (Sriwidharmanely and Syafrudin, 2012). Therefore, the full-mediation role of perceived ease of use between effort expectancy and behavioural intention to use MYOB accounting application is the first evidence in the literature. Further, the mediation role of perceived ease of use between performance expectancy and behaviour intention to use MYOB accounting application is also the first document in the literature. Previous pieces of literature were emphasized a direct relationship between performance expectancy and behavioural intention (but not accounting application adoption) (Arif et al., 2018; Attuquayefio and Addo, 2014).

5. CONCLUSION AND RECOMMENDATION

Many scholars have documented the importance of accounting application competency among accounting students. However, limited studies are investigating perceived ease of use of MYOB accounting application as a mediating role. This study determines the role of perceived ease of use as a mediating variable between two external factors (effort expectancy and performance expectancy) and behavioural intention to use MYOB accounting application. The result shows that there is perceived ease of use full-mediation role between effort expectancy and behavioural intention. This study practically implies that a department manager can improve the behavioural intention to use MYOB accounting application by enhancing the ease of use of MYOB accounting application. In this case, it can be achieved by enhancing the effort expectancy and performance expectancy. Theoretically, this finding extends the Model of Technology Acceptance by considering the external factors from TAM. However, the current investigation was limited to a small number of respondents, excluded perceived usefulness in the model, and technology acceptance model. Further work needs to be done to establish the relationship between external factors from TAM by widening the number of respondents, included other TAM's variables (e.g., perceived useful), and considering other theory (e.g., Unified theory of acceptance and use of technology).

Conflict of Interest

There is no conflict of interest

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Reference:


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