Antecedents of Internet Technology Adoption in Small Medium Business

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Abstract

The development of Internet Technology which is increasing rapidly and affordable bring new opportunities for small and medium enterprises (SMEs) in business process innovation. Various studies in the field of entrepreneurship and information technology have been made, but not much found a study that examines in particular the level of adoption of Internet technologies for the creation and development of SMEs. Considering SMEs as the key to success in the reduction of unemployment and economic growth, systematic studies which combine qualitative and quantitative approaches need to be done, particularly to anticipate the ASEAN free trade area competition. The approach of this study will utilize Technology-Organization-Environment (TOE) framework, which examines the internal and external factors of a SMEs that determines their adoption of internet technology. This study exploited a method of literature study and focus group discussion to 32 SME owners as respondents. Data from the study were processed using descriptive statistics technique to examine determine the possible antecedents of Internet Technology adoption by SMEs. The results opened further opportunity to investigate causal relationship among the variables of internet technology adoption.

Keywords: Technology Adoption, Small Medium Business, TOE Framework, Facilitating Conditions

1. Introduction

The growth of internet users since 2000 as a medium for the exchange of information has opened up many new opportunities in innovation business operations. Internet enables the exchange of information without depending on the place and time with some applications such as e-mail, enterprise resource planning (erp), point of sales (pos), e-shop, e-procurement, crowd sourcing, e-marketplace, and so forth. Not only large organizations use the Internet in their business process innovation and the exchange of information, but many small and medium enterprises (SMEs) also began to use it, especially when their business partners also increase the use of Internet technology.

Table 1 below shows the penetration of Internet users in Asia compared users around the world in second quarter of 2014.

<table>
<thead>
<tr>
<th></th>
<th>Population (2014 Est.)</th>
<th>Pop. % World</th>
<th>Internet Users 30-Jun-14</th>
<th>Penetration (% Pop.)</th>
<th>Internet % Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Only</td>
<td>3,996,408,007</td>
<td>55.60%</td>
<td>1,386,188,112</td>
<td>34.70%</td>
<td>45.70%</td>
</tr>
<tr>
<td>Rest of World</td>
<td>3,185,998,558</td>
<td>44.40%</td>
<td>1,649,561,228</td>
<td>51.80%</td>
<td>54.30%</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>7,182,406,565</td>
<td>100.00%</td>
<td>3,035,749,340</td>
<td>42.30%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

As we can observe from Table 1, the number of Internet Users in Asia is estimated 1,386,188,112 which is a 34.70% penetration from total population. It was also a tremendous growth of internet user, compared to fifteen years ago the numbers has grown from 114,304,000 to 1,386,188,112 which indicates an enormous 1213% growth.

Internet Technology enables SMEs to be able to reach the global market (Al-Qirim, 2003), thus the SME market segment geographically extended. Furthermore Internet technology may be used to improve effectiveness and efficiency in communicating both internally between the owners and employees and among employees also externally with business partners, both SMEs and their customers earn benefit (Zhu et al., 2004). The challenges faced by SMEs in the adoption of Internet Technology are contrast to large enterprises, especially regarding the lack of capital, resources and knowledge of internet technologies (Cragg & King, 1993; Welsh & White, 1981).

Specifically in Indonesia, small and medium enterprises (SMEs) are the key to success in the reduction of unemployment and economic growth in Indonesia. SMEs have contributed a great deal in Indonesia's economic resilience, especially in a period of economic stagnation and financial crisis in year 2008-2009 ago. Support to SMEs should be encouraged to support the Indonesian SMEs which patterned to become 10 biggest world economic power by 2025 according a report from the OECD (2012). Besides, the free trade zone agreement in ASEAN Economic Community is just around the corner which challenges SMEs in Indonesia to further more excel in the business competition against SMEs from neighboring countries within the scope of ASEAN. Therefore, researches on SMEs are considered very important and crucial for academics and business practitioners in Indonesia. Adoption of information technology for SMEs is an area of researches that requires a solid theoretical basis and helps strengthen the conceptual and empirical foundation.