EFFECT OF ORGANIZATIONAL COMPETENCE, ORGANIZATIONAL SUPPORT, AND ORGANIZATIONAL PRODUCTIVITY TOWARDS ADOPTION OF FINANCIAL TECHNOLOGY

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Abstract: The rapid development of internet technology with affordable prices raises new opportunities for micro, small, and medium enterprises (SMEs) in East Java in creating product innovation and marketing development. Various studies in the field of entrepreneurship and information technology have been carried out, but not many studies specifically examine the level of adoption of the Financial Technology system for business creation and development. This study focuses on the influence of organizational competence, organizational support, organizational productivity on financial technology adoption. This study uses a quantitative approach with a sample of SME businesses that use financial technology system adoption in the business that is run. The sample chosen using purposive sampling technique and selected 402 SMEs in East Java with the data analysis technique used is multiple linear regression techniques. The results of this study found that the influence of organizational competence, organizational support, and organizational productivity had a significant influence on financial technology adaptation.

Keywords: financial technology adoption, organizational competency, organizational support, and organizational productivity


The internet enables information exchange without depending on place and time with several applications such as e-mail, e-shop, e-procurement, crowdsourcing, e-marketplace, and so on. Not only large organizations that use the internet in business processes and information exchange but many small and medium enterprises (SMEs) also use it, especially when internet users outside their organizations also increase. Table 1 below shows the growth of internet users in Asia compared to users around the world in the period 2011 to 2017. Data in

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Table 1 shows that the growth in the number of internet users in Asia is greater than in other parts of the world. Internet technology enables SMEs to reach the global market (Al-Qirim, 2003), so that the SME market segment can become larger. Also, internet technology can improve effectiveness and efficiency in communicating both internally and externally, both SMEs and customers benefit (Zhu et al., 2004). The problems faced by SMEs in the adoption of internet technology are different from large companies, especially concerning the limitations of capital, resources, and knowledge of internet technology (Cragg and King, 1993; Welsh and White, 1981).

Specifically, in Indonesia, small and medium enterprises (SMEs) are the key to success in reducing unemployment and economic growth in Indonesia. SMEs have contributed greatly to the resilience of the Indonesian economy, especially in the period of economic stagnation and the financial crisis of 2008-2009. Support for SMEs needs to be promoted in a pattern to support Indonesia to become the world’s ten economic powers by 2025 according to the report from OECD (2012). Therefore, research on SMEs is considered very important for academics and business practitioners in Indonesia. The adoption of information technology for SMEs is a field of research that requires important theoretical foundations and helps strengthen existing conceptual and empirical foundations. The community cannot be served by the traditional financial industry because banks are bound by strict rules and the limitations of the banking industry in serving the people in the regions. Therefore, the public is looking for alternative funding in addition to the services of the traditional financial industry, among others: (1) Communities need alternative financing that is more democratic and transparent; (2) Cost of efficient financial services. Therefore, the role of the organization has an important role in supporting the success of financial technology adoption. In particular, this study has a purpose that is knowing the effects organizational competence, organizational support, and organizational productivity towards financial technology adaptation.

LITERATURE REVIEW

FinTech is a line of business based on using software to provide financial services. Financial technology companies are generally startups founded to disrupt incumbent financial systems and corporations that rely. On the other hand, Fintech is the technology that serves the clients of financial institutions, covering not only the back and middle offices, but also the front office that for so long has been human-driven. Bruggink and Mouilleron (2016) stated that finance technology (Fintech) is an effort to facilitate innovation in financial services by utilizing Information Technology.

Furthermore Campon (2016) added that Fintech would play an important role as disruptive innovation in financial services. According to Tornatzky and Fleischer (1990) the TOE framework classifies three factors that influence an organization in adopting technological innovation, namely (1) the technology context that describes both new technology and old technology that are relevant to the organization; (2) Organizational context which refers to organizational measurement such as reach, number of resources, number of resources that are not optimal; (3) Environmental context that refers to the environment in which the organization is located, including industrial considerations, competitors and government support. Studies conducted by
Gangwar et al. (2015) show predictive improvisation of internet technology adoption, especially cloud computing when the TAM (Technology Acceptance Model) model and the TOE Technology-Organization-Environment framework are integrated. The conceptual framework was developed and analyzed from the results of data collection on 280 companies in various fields. The results of their study found that the TAM model can be integrated with the TOE framework and show increased predictions.

Mukherjee’s (2015) study of financial technology adoption in India states that factors such as facilitating conditions must be the main concern, followed by perceived usefulness and perceived ease of use as the dominant factor influencing financial technology adoption. Bruggink and Mouilleron (2016) stated that finance technology (Fintech) is an effort to facilitate innovation in financial services by utilizing Information Technology. Furthermore Campenon (2016) added that Fintech would play an important role as disruptive innovation in financial services.

**THE INFLUENCE OF ORGANIZATIONAL COMPETENCE, ORGANIZATIONAL SUPPORT, ORGANIZATIONAL PRODUCTIVITY TOWARD ADOPTION OF FINANCIAL TECHNOLOGY**

Information and communication technology (ICT) is the key to continually advance technologies in all areas and improving efficiency, thus resulting in growth in potential value creation networks and existing markets (Dapp, 2011). ICT penetrates many different industries and responsible growth in revenue and production (Basu and Ferald, 2008). Chin and Fairlie (2007) stated that Networks are the key to increasing the global penetration of internet and computers. Adeosun, et al (2009) argued that the use of information technology provides a positive value for management strategies related to aspects of communication, information access, decision making, data management, and knowledge management in an organization. Technology Information can be a strength of strategy and tools for organizations that provide benefits to the aspect of promotion and the power of competitiveness (Buhalís, 2003).

Hengst and Sol (2001) argue that information technology provides benefits for business organizations to reduce costs and improve the ability of business organizations to coordinate with outside parties. In the current knowledge-based economy, SMEs need to adopt information technology because the adoption of Technology Information provides the ability for SMEs to provide better services and competitiveness (Apulu and Latham, 2011). Technology Information has also proven to have a positive impact on organizational performance (Maldeni and Jayasena, 2009). Modern business organizations are not expected to be able to work optimally and can have an adverse impact on overall economic resilience and growth (Berisha-Namani, 2009). Moreover, many studies mentioned the positive impact by adopting ICT for example, economic productivity, sustainable development, poverty alleviation, etc. (Madon, 2000; Walsham, 2001; Puri, 2007). Based on previous research conducted, the research hypothesis was formulated as follows:

**H1:** Organizational competence has a significant effect on financial technology adoption

**H2:** Organizational support has a significant effect on financial technology adoption

**H3:** Organizational productivity has a significant influence on financial technology adoption

**METHOD**

The research was carried out with a quantitative approach. The population in this study were micro, small, and medium entrepreneurs in East Java. The specified sample criteria are businesses that have adopted financial technology in running a business through a service provider (OVO). The sampling method used is purposive sampling. Primary data from this study were obtained from data obtained through questionnaires. The types of questions in the questionnaire are closed questions and the answer choices provided using a Likert scale range. Secondary data obtained from various sources include BPS East Java, publications of government institutions, and non-governmental institutions. Data were analyzed using multiple linear regression to determine factors that influence financial technology adoption, as follows:
Financial Technology Adoption = \alpha + \beta_1 \text{Organizational Competence} + \beta_2 \text{Organizational Support} + \beta_3 \text{Organizational Productivity} + \varepsilon

RESULTS AND DISCUSSION

Based on a descriptive analysis shows that based on a total sample of 402 micro entrepreneurs small, and medium-sized enterprises in East Java show that there are male and female entrepreneurs between <17 years old and > 36 years old. The length of business that has been carried out varies, including <3 years is a food and beverage business; 3-6 years is a business of clothing and accessories; 7 - 10 years minimarket/supermarket business. The following in Table 2 is the result of descriptive analysis of the data of the research sample:

Table 2  Descriptive Data Sample Research

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Business Age</th>
<th>Type of Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>&lt;17 years</td>
<td>&lt;3 years</td>
<td>Food / Beverage</td>
</tr>
<tr>
<td>Women</td>
<td>18 - 26 years</td>
<td>3-6 years</td>
<td>Clothing / Accessories</td>
</tr>
<tr>
<td></td>
<td>27 - 35 years</td>
<td>7-10 years</td>
<td>Minimarket / Supermarket</td>
</tr>
<tr>
<td></td>
<td>&gt; 36 years</td>
<td>10-15 years</td>
<td>Others</td>
</tr>
</tbody>
</table>

Sources: Processed Data (2018)

Multiple linear regression results in Table 3 show the effect of independent variables, namely organizational competence on adoption of financial technology as the dependent variable proven with a significant level of 0.000, so the hypothesis 1 (H₁) received. This result shows that the variables of organizational competence with indicators are: (1) knowledge of information and communication technology; and (2) understanding of the use of technological innovation influences the success of financial technology adoption. This proves that with the availability of resources in the form of applications, EDC, booths, employees, and understanding of the product very well, customers can easily obtain information from each shopping center that works with service providers (OVO).

The influence of independent variables is organizational support. The adoption of financial technology as a dependent variable is proven with a significant level of 0.000, so that hypothesis 2 (H₂) is accepted. This result shows that organizational support variables with indicators are: (1) organizational commitment; and (2) organizational governance influences the success of financial technology adoption. This is evident from the merchants and customers who feel innovations in payments and transactions in a fast process. Promotional benefits are diverse and informed by cell phone on the registered number. Service providers also seek to expand their reach, not only in Indonesia but also abroad. Also, cooperation in terms of ease of payment is carried out with other companies.

The influence of the independent variables, namely the productivity of the organization on the adoption of financial technology as the dependent variable, is proven with a significant level of 0.000 so that hypothesis 3 (H₃) is accepted. This result shows that the variables of organizational productivity with indicators are education of human resources, the ability of human resources, and the Skills of human resources influence the success of financial technology adoption. That is evident by the fact that OVO service providers not only provide socialization about products but also mentoring and sharing that is done both with fellow employees and with merchants and customers. If the merchant
needs education, the service provider will send a team to help educate.

Innovation successfully transforms an existing system or market by introducing practicality, ease of access, convenience, and economic costs, known as Disruptive Innovation. Performance issues often become obstacles to the Small and Medium Enterprises (SMEs) sector to move forward. Support of Science and Technology is believed to help improve performance. The development of Science and Technology is increasing rapidly, and anything can be done. The use of information technology applications has penetrated various sectors of human life. Although it must be acknowledged, the use of information technology is still categorized as one of the resources that are classified exclusively and identically with an expensive sophistication.

Organizational competency, according to Tan, et al (2007) describes organizational readiness as managers’ perceptions and evaluations of the extent to which they believe that their organization has awareness, resources, commitment, and governance to adopt information technology. Also, top management support is a perception and action of high officials about the use of technological innovation in creating values for the company (Salwani et al, 2009). On the other hand, Schillewaert et al (2005) argue that training is the extent to which the company instructs its employees to use tools in terms of quality and quantity. Therefore, the role of organizations has become important in the success of Adoption Financial Technology.

To optimize the role of FinTech, organizations that have implemented FinTech-based businesses can work with Incumbents industries (Banks and Non-Bank Financial Institutions). This effort can be pursued in several forms, including: First, information path collaboration between FinTech and existing financial institutions by utilizing large customer data and distribution channels that have been built. The use of FinTech functions is expected to improve the efficiency of business banks and financial institutions. Second, product collaboration is a solution for consumers. For this, FinTech players together with banks and financial institutions need to carry out the design process (thinking design) to make products (bundling products) that are beneficial for both parties.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The establishment of innovative financial technology is important in the role of the organization in supporting financial technology success. Therefore, it can be concluded that organizational competence has a significant effect on financial technology adoption showing that knowledge of information technology and communication and understanding of the use of technological innovations in organizations need to be improved so that the development of the financial technology industry is increasingly in line with the needs of society. Also, based on the results of this study that organizational support has a significant effect on financial technology adoption. This shows that organizational commitment and organizational governance are things that need to be considered so that the coordination and development of

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Table 3  Results of Multiple Linear Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.135</td>
<td>.196</td>
<td>5.780</td>
<td>.000</td>
</tr>
<tr>
<td>Organizational competence</td>
<td>.203</td>
<td>.045</td>
<td>4.549</td>
<td>.000*</td>
</tr>
<tr>
<td>Organizational support</td>
<td>.249</td>
<td>.069</td>
<td>3.598</td>
<td>.000*</td>
</tr>
<tr>
<td>Organizational productivity</td>
<td>.272</td>
<td>.042</td>
<td>6.540</td>
<td>.000*</td>
</tr>
</tbody>
</table>

Dependent Variables: Adoption of Financial Technology

*) significance at level 5%
the Financial technology business model can run well. This study also found that organizational productivity has a significant influence on financial technology adoption. This shows that the education of human resources, the ability of human resources and human resource skills influence the success of financial technology adoption. Therefore, organizations also need to pay attention to the quality of human resources so that the success of financial technology adoption can succeed.

Recommendations

Recommendations from the results of this study are: (1) Micro, small and medium enterprises need to make strategic planning related to improving organizational competencies and organizational productivity by making the vision and mission of the organization in accordance with Disruptive Innovation; (2) Commitment and governance of small, micro, and medium-sized businesses are adjusted to the dynamics of the implementation of a rapidly changing financial technology adoption system so that an open policy with change is needed; (3) Adoption of financial technology requires collaboration that synergizes between the government, employers, and banks so that the existing system can run as expected.

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