ADVANCES IN GLOBAL BUSINESS RESEARCH
Vol. 13, No. 1,
ISSN: 1549-9332

Refereed Proceedings of the 13th Annual World Congress of the
Academy for Global Business Advancement (AGBA)
and
2016 AGBA—Indonesia Chapter’s Inaugural Conference
www.agba.us

Conference Hosted by the
Faculty of Economics and Business
Universitas Sebelas Maret
Indonesia

November 26 - 28, 2016
August 3 - 4, 2016

Proceedings Edited By

Dana-Nicoleta Lascu
University of Richmond
Richmond, Virginia, USA

Eric Werker
Simon Fraser University
Vancouver, British Columbia, Canada

Gary L. Frankwick
University of Texas at El Paso
El Paso, Texas, USA

Irwan Trinugroho
Universitas Sebelas Maret
Surakarta, Central Java, Indonesia

Zafar U. Ahmed
Academy for Global Business Advancement
Fort Worth, Texas, USA
DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS MODERATING VARIABLE IN FAMILY BUSINESS
Muhammad Kholid Arif Rozaq, Universitas Sebelas Maret, Indonesia
Mugi Harsono, Universitas Sebelas Maret, Indonesia ......................................................... 2344

PATHOLOGY OF SOCIAL ACCOUNTABILITY IN PARTICIPATORY LOCAL DEVELOPMENT BUDGETING (A CASE STUDY ON KELURAHAN DEVELOPMENT FUND IN SURAKARTA CITY, INDONESIA)
Rutiana Dwi Wahyunengseh, Sebelas Maret University, Indonesia ................................... 2357

THE EFFECT OF PERCEIVED ORGANIZATIONAL SUPPORT FOR INNOVATION ON INNOVATIVE WORK BEHAVIOR WITH LEADER-MEMBER EXCHANGE MEDIATION ON THE LECTURER
Anis Eliyana, Universitas Airlangga, Indonesia
Diah Yovita Suryani, Universitas Wijaya Kusuma, Indonesia
Tulus Hariyono, Universitas Sebelas Maret, Indonesia
Ria Mardiana Yusuf, Universitas Hasanuddin, Makassar-Indonesia
Dwijo Waskito, Universitas Airlangga, Indonesia .............................................................. 2364

EFFECT OF STOCK BUYBACK TOWARDS FINANCIAL PERFORMANCE AND MARKET REACTION : STUDY OF LISTED COMPANIES IN INDONESIA STOCK EXCHANGE
Etano Garda Ariyan, Institut Teknologi Bandung, Indonesia
Ahmad Danu Prasetyo Institut Teknologi Bandung, Indonesia........................................... 2373

A FORECASTING METHOD FOR INFLUENZA VACCINE DEMAND DURING HAJJ PERIOD CASE STUDY: A VACCINE MANUFACTURER IN INDONESIA
Muhammad Jundi, Institut Teknologi Bandung, Indonesia
Akbar Adhiutama, Institut Teknologi Bandung, Indonesia .................................................. 2358

E-TRUST: ANTECEDENTS AND THEIR CONSEQUENCE
Diesyana Ajeng Pramesti, Muhammadiyah Magelang University, Indonesia
Muh Al Amin, Muhammadiyah Magelang University, Indonesia
Henry Prihanto Nugroho, Gadjah Mada University Graduate School Tourism Studies ..... 2393

INNOVATION OF THE SALAM FINANCING PRODUCT (A CASE STUDY IN BUMI RINJANI PROBOLINGGO SRB)
Siti Maria Wardayati, University of Jember, Indonesia
Ahmad Roziq, University of Jember, Indonesia
Wiwik Fitria Ningsih, University of Jember, Indonesia ..................................................... 2402

ROLE OF STRATEGIC MANAGEMENT ACCOUNTING AND INTEGRATED PERFORMANCE IN HOTEL INDUSTRY
Antonius Singgih Setiawan, Musi Charitas Chatolic University, Indonesia
Rahmawati, Universitas Sebelas Maret, Indonesia ........................................................... 2421
DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS MODERATING VARIABLE IN FAMILY BUSINESS

Muhammad Kholid Arif Rozaq, Universitas Sebelas Maret, Indonesia
Mugi Harsono, Universitas Sebelas Maret, Indonesia

Abstract
This study examines and analyzes the determinant of intentions of e-commerce adoption, namely relative advantages, organizational readiness, and competitive pressures with strategic orientation as a moderating variable. The sample of this study is the family business Small and Medium-sized Enterprises (SMEs) performer in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area, which consist of 101 respondents. The sampling method used is nonprobability sampling, while the technique used is purposive sampling. The analysis of data is using moderated regression analysis. Based on the data analysis, the results are: 1) relative advantages, organizational readiness, and competitive pressures affecting on the intention of e-commerce adoption; 2) strategic orientation moderates the effect of competitive pressures toward the intention of e-commerce adoption.

Keywords: TOE, E-Commerce, family business, SMEs

Introduction
The development of the technology, including the internet, becomes one of many strategic pathways in the process of industry revolution. This includes electronically business revolution or e-business (Amit and Zott, 2001). Several studies provide evidences that internet is suspected to be revolutionary modifier factor in the traditional small business practice (Daniel et al, 2002; Geiger and Martin 1999; Siu 2002; Levenburg and Magal 2004).

Based on the data obtained from Indonesian Internet Provider Association (APJI - Asosiasi Penyelenggara Jasa Internet Indonesia), on the 2013 the Indonesian internet user in business sector amounted to 66.77% (APJII, 2013). It provides information that more than half of business people have been using the internet technology. The industrial sectors consist of many sectors such as processing industry, hospitality and restaurant industry. Indonesian economic widely supported by the small and medium-sized enterprises (SMEs) which has more than 52 units in the year of 2011 and giving contribution to the Gross Domestic Product (GDP) in the amount of 60% (Syuhada and Gambetta, 2013). The number of contribution of SMEs shows that the developments of SMEs are very fundamental. However, there are many obstacles faced by the SMEs, among other are marketing weakness, pressures from foreign product, the lack of articulation of the existence of such products on the market (Syuhada, 2013).

One example of internet usage in conduction business is e-commerce. The definition of e-commerce has a lot variety, in this study referring to the definition of Turban et al., (2008) e-commerce is a purchasing, selling or exchange of a product, information and services through the computer network, including the internet. It cannot be denied that e-commerce has changed many things in business operation. The changes mentioned are not only in the way of people selling, buying and doing an agreement with the consumer or suppliers, but also changed the perspective of business itself. The changes give a massage that in order to survive in the new business model, business people has to be forced to adopt the technology (Rahayu and Day, 2015).
E-commerce is not a new technology. An adaptation of e-commerce by the business people have been started in the year of 1995 in the very simple form (Moertini, 2012). Based on APJII from the total numbers of companies that used internet, just 18% of them are SMEs, and from that amount there are family businesses. SMEs can be categorized into two types, based on the business type that is family business and non-family business (Gabrielsson and Huse, 2005). Family business is a company which its ownership is fully owned / managed by one or more family members. Meanwhile, non-family businesses are owned by two or more people, where among them there were not any kinship (Grabrilsson and Huse, 2005). Family business often to be criticized for failing to invest in the new business, often to avoid risk, and resisting changes especially in the technology utilization (Eddleston et al., 2008). This case shows the need for further study regarding various issues that related with the adoption of the internet technology in the family business. Several researchers (Auger and Gallaugher 1997; Thong and Yap 1995; Zank and Vokurka 2003) revealed that partly of family business are unwilling to do an adoption of e-business, whereas the rests are willing to do the adoption naturally. Then the question arises, why partly of family business choose to adopt e-commerce and the rests of it do not. Even though, they are facing relatively similar market challenge, thus, it still needs to be examined until now (Boumediene and Kawalek, 2008).

Based on the arguments above, this study is conducted with the aim to see the important factors that affect the intention of e-commerce adoption in family business SMEs. SMEs are interesting to be studied because the e-commerce adoption is usually carried out by large-scale enterprises, whereas SMEs are still reluctant to adopt it (Auger and Gallaugher 1997; Thong and Yap 1995; Zank and Vokurka 2003). The benefits of the internet by providing location and time flexibility and ease of communication will help small companies to attain efficiency and cost saving. Previously, this only can be found on large scale enterprises (Iacovou et al. 1995; Longenecker et al. 1997). Therefore, with the existence of e-commerce, SMEs are also alleged to be able to enjoy its benefits.

Research about the adoption of e-commerce can be explained with the framework developed by Tornatzky and Fleischer (1990). The framework is known as Technology-Organization-Environment (TOE). TOE framework considered to be an integrative framework which provides a basic holistic theory and guidance in the study of information technology adoption / diffusion. In this framework, there are three aspects of the company which affect the adoption of technological innovations; technological aspects, organizational aspects, and environmental aspects. Technological aspects are related to technology that is relevant with the company. The organizational aspects are related to the resources of the company, which is indicated by the size of the company and the complexity of the managerial structure of the company. Afterwards, the environmental aspects refer to the other parties around the company, such as competitor, suppliers, and the government (Zhu et al., 2002).

TOE theory has also been tested and validated by various studies (such as Ramdani et al 2013, Olivera and Martins 2010, Zhu et al., 2003, Premkumar and Robert 1999, Iacovou et al 1995). Moreover, TOE framework is considered as a generic theory from the adoption / diffusion of technology (Zhu et al. 2003). The identification of the factors used in the TOE framework shows that there are several inconsistency, thus providing a gap for the further research. This inconsistency are 1) relative advantage effect toward the intention of the technology adoption, several studies showed that relative advantage has an effect towards the intention for technology adoption (Rahayu & Day, 2015; Wang & Ahmed, 2009; Iacovou et al., 1995), but the research conducted by Huy et al., (2012) shows that relative advantage has no effect toward the intention of technology adoption; 2) organizational readiness effect toward the intention for technology adoption, the research
conducted by Huy et al., (2012), Ramdani et al., (2013), and the research conducted by Iacovou et al., (1995) shows that organizational readiness has an effect toward the intention for technology adoption, whereas the research conducted by Wang & Ahmed (2009) shows that organizational readiness has no effect toward the intention for technology adoption; 3) competitive pressure effect toward the intention for technology adoption, several researches show that competitive pressure has a significant effect toward the intention for technology adoption (Wang & Ahmed, 2009; Iacovou et al., 1995), and several researches also showed an insignificant result (Jeon et al., 2006; Ramdani et al., 2009).

An argument that can be offered for the inconsistency in result finding is by adding another variable as the moderation (Mathieu & Zajac, 1990). The research conducted by Wang & Ahmed (2009) has found moderation factors in the context of the TOE framework that is the orientation of business strategy used by the person who running a family business. The orientation of strategy becoming a factor that needs to be considered because the characteristic of the family business that is idiosyncratic. The business orientation in the family business shows its uniqueness comparing with the companies that has value maximizing orientation in professional business management (Sharma et al., 1996).

This study will be conducted by using SMEs in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area as a research object. SMEs in DIY is developing quite well. This is supported by the statement of Baswir (1998) who states that industrial enterprises in Yogyakarta area are mainly SMEs. The DIY Region is one of many cities with creative industries, thus this city is appropriate to be the research object. This business type has a high opportunity to adopt e-commerce.

**Literature Review and Hypothesis Development**

1. **TOE (Technology – Organisation – Environment)**

   TOE framework that developed by Tornatzky and Fleischer (1990) is considered as an integrative framework that gives holistic basic theory for researches in the adoption or diffusion of Information and Communication Technology (ICT). TOE, typically evaluates the various technology that is related with the organization and environmental factors that will simplify the process of adoption or diffusion (Ramdani et al., 2013). TOE has been widely used to describe the process of adoption of several innovation including the organizational system (Mishra et al., 2007), and e-business (Zhu et al., 2006). A meta-analysis of 75 researches that has been done by Tornatzky and Klein (1982) provides 10 of the most frequently used characteristic that is related to adoption process, namely relative advantage, complexity, communicability, divisibility, cost, profitability, compatibility, social approval, triability and observatibility.

   TOE framework is consistent with the opinion of Rogers (1983) that discuss about diffusion of innovation (DOI) theory. This theory is also focused on the characteristics of organization both internally and externally, as well as the characteristics of technology as the diffusion stimulant of new technology. Many studies that have been conducted identify technology as an important factor and key to achieve the successful adoption of information system (Crook and Kumar, 1998; Grover, 1993; Zhu et al. 2002; Shaw and Chang, 2005).

   The assumption adopted in this study is technology is an adoption driver, thus, the competency of technology will positively affect the intention of e-commerce adoption process. The companies that have high capability will reflect company readiness to apply e-commerce adoption. Factor that identified as inconsistent in technology context is relative advantage. Rogers (1983) defines relative advantage as relative benefit from an
innovation which is considered as a better idea. In relation with technology, Rogers (1983) also provides an explanation that relative advantage is a degree where technological factor is perceived to generate greater benefit for company. The assumption of benefit refers to the return and possible benefits that will be earned from e-commerce adoption in organization (Tiago and Maria, 2010; Iacovou et al., 1995). Several researchers use this variable and get significant result (Premkumar, G and Robert, M, 1999; Looi, 2005; To and Ngai, 2006; Al-qirim, 2007; Sparling et al., 2007; Wang and Ahmed, 2009, Ramdani, et al., 2009; Scupola, 2009; Oliveira and Martin, 2010; Ghobakhlo et al., 2011; Gangwar et al., 2015). From the analysis above, the hypothesis proposed is:

\( H_1 \): relative advantage has a significant positive effect on the intention of e-commerce adoption in family business

In organization context, Zhu et al., (2003) measure organizational readiness with firm scope and firm size. Firm scope strongly linked with company ability to invest in the information technology (Dewan et al., 1998; Teece, 1997). Firm scope will encourage company to adopt e-business. This condition will place firm scope as predictor in the process of e-commerce adoption, with an assumption of, the more comprehensive the firm scope thus the company internal coordination expense will be more expensive (Gurbaxani and Whang, 1991), inventory and material expense also will be more expensive (Chopra and Meindl, 2001). Next assumption is related with e-commerce adoption, company with wider firm scope will have opportunity to get higher benefit with e-commerce adoption, compared to the traditional business process (Levenburg et al., 2006). Company size (firm size) consistently known as a factor that influences e-commerce adoption (Damanpour, 1992). Related with e-commerce adoption, big companies have several benefits or advantages compared with small companies. The advantages are, big companies have more resource to simplify this adoption, more likely to achieve economies of scale, and it has bargaining power with business partner to adopt the technology. This is in line with the argument of Iacovou et al., (1995) who states that organizational readiness is related with financial level and technological resources from company. Both factors are necessary to be considered because small companies tend to get lack and weak resources, which is needed for doing the adoption. This, in turn will restrict the capability to receive benefit from technology. Thus, the next hypothesis is:

\( H_2 \): organization readiness has a significant positive effect on the intention of e-commerce adoption in family business

Furthermore in environment context, Zhu et al., (2003) identify company’s environmental aspect indicators that can affect e-commerce adoption that are consumer readiness, competitive pressure, and lack of trading partner readiness. In this research, a factor that will be tested is competitive pressure. This is due to the literature review result which shows that the result of previous research on this variable is remains inconsistent. The level of competitive pressure is a condition of the level of competition that acts as the adoption driver (Crook and Kumar, 1998; Grover, 1993; Zhu et al., 2003; Iacovou, et al., 1995). This pressure is derived from competitors or companies’ external factor, which drives companies to adopt new technology in order to survive in business. The next indicator is the lack of business partner readiness or trading partner readiness. According to Zhu et al., (2003), company that decides to apply e-commerce adoption must be supported by business partner readiness in companies’ value chain to apply such adoption too. Thus, the system that is developed by the companies will be compatible with its business partner’s system. This provides a conception that the readiness or unreadiness of business partner will affect companies’ e-commerce adoption process. Therefore, the next hypothesis is:
H₃: competitive pressure has a significant positive effect on the intention of e-commerce adoption in family business

Family business’ strategic orientation

The definition for strategic orientation is a company's strategy that aims for creating appropriate behavior in order to achieve excellent performance (Zhou et al., 2005). Family business often shows idiosyncratic character due to the existence of family relationship and business (Sharma et al., 1996). Idiosyncratic character will give different orientation of family business strategy compared to professionally managed company. Family business basically can be classified based on organizational value such as family-centered business or business-centered families (Singer and Donohu, 1992). Moreover, family business is more conservative and reluctant to change (Hall et al., 2001). The classification of family business is also expressed by Birley et al., (1999), that categorized into 3 different clusters: (1) Family rules group (family oriented business) where business decisions always linked with the existence of family, family possession protection and safeguarding the reputation of family becomes important thing, (2) The Family out group (business oriented company) that is opposite of Family rules group, where the focus of this family business focused on business activities. This type of orientation is concerned about emerging issues such as the adoption of new technology, business strategy growth, even opening up for external investors, and (3) The Family-Business Jugglers (company with balanced orientation), this orientation does not clearly articulate on which side of orientation the business lean on. The characters of these orientations are supposed to be the important factors that affect the decision taken by family business to apply the e-commerce adoption or not.

This company's strategy also gives a framework for decision making and it will affect the behavior that will have an impact on innovation (Miles and Snow, 1978). According to Auger et al., (2003) entrepreneur companies who have a focus on the future, will have a more proactive and aggressive, passionate pursuit toward new opportunities, and more courageous to take a risk to find innovative solution in facing the challenges. In the literatures about SMEs, several study found that companies with the entrepreneur strategy will experience sales growth (Freel, 2000; Shirk, 2003), have more positive attitudes toward the development of internet, and will be a first mover in e-business (Auger et al., 2003).

Strategic orientation on family business provides a probability to moderate relationship between relative advantage and e-commerce adoption intention. This is based on tendency towards companies’ orientation. Based on the clustering such as proposed by Birley et al., (1999), business-oriented companies will tend to prioritize some initiative affairs, which is related to the business. That initiative can be in the form of the technology utilization, with awareness that this adoption would give benefit for business. The benefits earned may include the reduction of transaction cost, cash flow improvement, inventory cost reduction, and so forth. Therefore it will create competitive advantage. On the contrary, family-oriented business, tend to prioritize family's welfare, while other problems that arises related to expense and other risk are ignored (Wang and Ahmed, 1999). Such orientation tends to make the adoption activity get delayed, until in a certain point where the owner is convinced about the benefit of technology's adoption.

There is also a probability that strategic orientation could interacts with organizational readiness variable in the adoption process. Business-oriented companies tend to have more support from organizational side. It starts with better employees support from the labor and managerial personnel. This is because right from the recruitment process employees are selected based on their ability and the conformity with the job, instead of family closeness. This orientation will simplify the development of technology.
In contrast, family-oriented companies will hire employees based on closeness of the family and not based on competency. Whereas, according to Grable and Lytton (1999) education level and competence become an important discriminant for business decision making.

Competitive pressure can also interact with the strategic orientation of family business. Orientation that is centered toward family or business affects the ability to receive pressure from the outside party. Orientation that centered on family tends to have limited network and very centered on the owner (Wang et al., 2004). Concentration of ownership creates an information constraint that related with the limited and incomprehensive competitive pressure. Thus, the analysis taken to solve problems tends to be unsatisfied and centralistic toward the owner (Casson, 2005). This condition will create difficulty for the company to adopt new technology, although in fact there is external pressure that creates demand on the technological change. In contrast, company with business as its main orientation will give more priority for the transformation in order to maximize profit (Drozdow and Carrol, 1997).

With the explanations on the above theories' perspective, thus the proposed hypotheses are:

$H_4$: strategic orientation of family business moderates the effect of relative advantages toward the intention of e-commerce adoption.

$H_5$: strategic orientation of family business moderates the effect of organization readiness toward intention of e-commerce adoption.

$H_6$: strategic orientation of family business moderates the effect of competitive pressure toward intention of e-commerce adoption.

---

**Research Methods**

1. **Sample**
   The sample in this study are the owner of family businesses of Small Medium Enterprises in Yogyakarta, or 101 respondents.

2. **Variable Measurement**
   a. **Intention to adopt e-commerce adoption**
      Intention to adopt e-commerce is measured with 3 statements which are adopted from Ajzen (2006).
   b. **Relative Profit**
c. **Organization Readiness**

The organization readiness is measured using 9 items, which are adopted from Wang and Ahmed (2009).

d. **Competitive Pressure**

Competitive Pressure is measured using 4 items which are adopted by Zhuet al. (2003) and Turban (2004).

e. **Strategic Orientation**

The measurement of Strategic Orientation is adopted from Wang and Ahmed (2009). The variable is measured by providing a simple statement about two companies condition. For example, A-is a Family-Oriented business and B-is a Business-Oriented firm. Respondents were asked to give a value distribution of 100 points between A and B companies based on respondent’s perspective on their company condition compared to the condition of company-A and B that had been described. It’s prohibited to give a same value for company A and B. the measurement of Family-oriented business Strategy is performed using dummy, 0 for Family-Oriented business and 1 for Business-oriented firm.

**Result**

1. **Research Instrument Test**

Validity testing is performed to four main variables in this research, which are relative profit, organization readiness, competitive pressure, and intention to adopt e-commerce. Meanwhile the strategy orientation variable could not be tested because it is an “observe variable” not a “latent variable” which needs an indicator.

Based on the result of validity testing, there are 6 non-valid items that will be excluded from the analysis, 1 item from relative profit statement, 3 items from organization readiness statements, and 2 items from competitive pressure statements.

From the reliability testing, the results are: the reliability of relative profit is 0.610; the reliability of organization readiness is 0.796, the reliability of competitive pressure is 0.669, and the reliability of intention to adopt e-commerce is 0.707.

Hypothesis Test

This research uses moderated regression analysis method to test the hypotheses 1-6. Table 1 shows three regression models tested. Model 1 examines the influence of independent variable, Relative Profit, Organization Readiness, and competitive pressure on the intention to adopt e-commerce. Therefore, the first, second, and third hypothesis are supported. Model 2 shows the business strategic orientation as moderating variable has no significant effect on the intention adopt e-commerce. Model 3 shows business strategic orientation business only moderate the effect of competitive pressure on the intentions to adopt e-commerce, while the influence of relative advantages and Organization Readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, according to the result the fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

<table>
<thead>
<tr>
<th>Table 1. Result of Moderated Regression Analysis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to Adopt E-Commerce Ad</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Model 1 (t) Model 2 (t) Model 3 (t)</td>
</tr>
<tr>
<td>Relative Profit (RA) 2.712* 2.638* 3.030*</td>
</tr>
</tbody>
</table>
Discussion  
The results show Relative Profit affects the intention to adopt e-commerce. Manager’s perception regarding the benefits to be gained with the use of technology will enhance their intention to adopt the technology, including e-commerce. This is consistent with the findings of Premkumar, G and Robert, M (1999); Looi (2005); To and Ngai (2006); Al-qirim (2007); Sparling et al. (2007); Wang and Ahmed (2009), Ramdani, et al. (2009); Scupola (2009); Oliveira and Martin (2010); Ghobakhlo et al. (2011); and Gangwar et al. (2015) which shows that the Relative Advantage have a positive influence on the intention to adopt the technology.

The influence of organizational readiness in the adoption of e-commerce is supported in this study. This phenomenon can occur because the company that has sufficient resources, in terms of financial and human resources will be easier to adopt the technology, including e-commerce. Adoption of technologies by companies that have sufficient resources will be more likely to achieve economic scale and improve the bargaining power to the business partner for technology adoption. It supports research conducted by Huy et al., (2012), Ramdani et al., (2013), as well as Iacovou et al., (1995) which show that organization readiness affects the intention to adopt technology. However, this result is contradictory with the result of Wang and Ahmed (2009) study which does not support the influence of organization readiness in adopting e-commerce. This inconsistence in very likely to occur because organization readiness in preparing the appropriate technology and financial sources is different in each company.
The effect of competitive pressure on the intention to adopt e-commerce is supported in this study. This phenomenon takes place due to the existence of pressure from competitors to adopt new technology in order to continue their business. The result of this study support the study performed by Wang & Ahmed (2009) and Iacovou et al. (1995) which show that competitive pressure affects the intention to adopt technology. The fact shows that family business get more pressure from external parties to be able to execute transaction through internet or e-commerce, and the adoption is not performed due to manager’s self awareness. This is in line with the argument of Rogers (1983) who states that family business rarely become an early adopter. Thus, when the pressure from external parties demanded changes and innovation, family business must take a decision whether the technology adoption will provide benefits, which in turn will leads to metamorphic changes.

This study result shows that business strategic orientation does not moderate the effect of relative profit and organization readiness on e-commerce adoption. This shows that business strategic orientation implemented by company, both family oriented or business oriented, do not clarify (strengthen or weaken) the effect of relative profit and organization readiness on the intention to adopt e-commerce. The result of this study also shows that business strategic orientation moderates the effect of competitive pressure on the intention to adopt e-commerce. The moderation effect is positive, which means that the effect of competitive pressure will be greater on the business oriented companies than family oriented companies. The family oriented companies tend to have narrower network and is highly centered on the owner (Wang et al., 2004). The concentration of power on the owner may lead to the emergence of information barrier in its relation with competitive pressure, thus the analysis of problem solving tend to be less satisfying and is centralistic in owner (Casson, 2005). This condition will makes company find difficulty in adopting the new technology even if the pressure from external parties demanded company to perform changes. Contrary, business oriented company will prioritized the changes to maximize their profits (Drozdow and Carrol, 1997).

Conclusion, limitation, and suggestion

1. Conclusion

The conclusion of hypothesis testing result shows that relative profit, organization readiness, and competitive pressure have a significant effect on the intention to adopt e-commerce. The first, second, and third hypothesis is supported. Family-oriented business strategy as moderation variable does not have a significant effect on the intention to adopt e-commerce. Family-oriented business strategy only moderates the effect of competitive pressure in the intention to adopt e-commerce. While the effect of relative profit and organization readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, it means that fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

2. Limitation and suggestion

a. This research only shows a few inconsistency in variables from the previous research. It is possible to get several factors which could be used for further research and to retest the moderation factor used.

b. This research only focused in Sleman, Bantul, and Yogyakarta areas. It’s rather complicated to make a general conclusion in Yogyakarta province, researcher is suggested to consider about expanding region and distribution of sample research.

c. Future research need to consider industry cluster in family business to generate a more accurate result.
d. In testing the hypotheses, researchers need to consider the lost predictor items, especially in competitive pressure hypothesis.

**Bibliography**


Hong, W., and Zhu, K., 2006. Migrating to internet-based e-commerce: factors affecting e-commerce adoption and migration at the firm level. Information & Management. Vol.43 No. 2, pp. 204-21


Niehm Linda S; Keila Tyner; Mack Shelley and Margaret Fitzgerald. 2010. Technology adoption in small family-owned businesses: accessibility, perceived advantage, and


DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS MODERATING VERIABLE IN FAMILY BUSINESS

by Leon Akbar
DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS MODERATING VARIABLE IN FAMILY BUSINESS

Muhammad Kholid Arif Rozzaq, Universitas Sebelas Maret, Indonesia
Mugi Harsono, Universitas Sebelas Maret, Indonesia

Abstract

This study examines and analyzes the determinant of intentions of e-commerce adoption, namely relative advantages, organizational readiness, and competitive pressures with strategic orientation as a moderating variable. The sample of this study is the family business Small and Medium-sized Enterprises (SMEs) performer in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area, which consist of 101 respondents. The sampling method used is nonprobability sampling, while the technique used is purposive sampling. The analysis of data is using moderated regression analysis. Based on the data analysis, the results are: 1) relative advantages, organizational readiness, and competitive pressures affecting on the intention of e-commerce adoption; 2) strategic orientation moderates the effect of competitive pressures toward the intention of e-commerce adoption.

Keywords: TOE, E-Commerce, family business, SMEs

Introduction

The development of the technology, including the internet, becomes one of many strategic pathways in the process of industry revolution. This includes electronically business revolution or e-business (Amit and Zott, 2001). Several studies provide evidences that internet is suspected to be revolutionary modifier factor in the traditional small business practice (Daniel et al, 2002; Geiger and Martin 1999; Su 2002; Levenburg and Magal 2004).

Based on the data obtained from Indonesian Internet Provider Association (APJI - Asosiasi Penyelenggara Jasa Internet Indonesia), on the 2013 the Indonesian internet user in business sector amounted to 66.77% (APJII, 2013). It provides information that more than half of business people have been using the internet technology. The industrial sectors consist of many sectors such as processing industry, hospitality and restaurant industry. Indonesian economic widely supported by the small and medium-sized enterprises (SMEs) which has more than 52 units in the year of 2011 and giving contribution to the Gross Domestic Product (GDP) in the amount of 60% (Syuhada and Gambetta, 2013). The number of contribution of SMEs shows that the developments of SMEs are very fundamental. However, there are many obstacles faced by the SMEs, among other are marketing weakness, pressures from foreign product, the lack of articulation of the existence of such products on the market (Syuhada, 2013).

One example of internet usage in conduction business is e-commerce. The definition of e-commerce has a lot variety, in this study referring to the definition of Turban et al., (2008) e-commerce is a purchasing, selling or exchange of a product, information and services through the computer network, including the internet. It cannot be denied that e-commerce has changed many things in business operation. The changes mentioned are not only in the way of people selling, buying and doing an agreement with the consumer or suppliers, but also changed the perspective of business itself. The changes give a massage that in order to survive in the new business model, business people has to be forced to adopt the technology (Rahayu and Day, 2015).
E-commerce is not a new technology. An adaptation of e-commerce by the business people have been started in the year of 1995 in the very simple form (Moertini, 2012). Based on APJII from the total numbers of companies that used internet, just 18% of them are SMEs, and from that amount there are family businesses. SMEs can be categorized into two types, based on the business type that is family business and non-family business (Gabrielsson and Huse, 2005). Family business is a company which its ownership is fully owned / managed by one or more family members. Meanwhile, non-family businesses are owned by two or more people, where among them there were not any kinship (Gabrielsson and Huse, 2005). Family business often be criticized for failing to invest in the new business, often to avoid risk, and resisting changes especially in the technology utilization (Eddleston et al., 2008). This case shows the need for further study regarding various issues that related with the adoption of the internet technology in the family business. Several researchers (Auger and Gallaugher 1997; Thong and Yap 1995; Zank and Vokurka 2003) revealed that partly of family business are unwilling to do an adoption of e-business, whereas the rests are willing to do the adoption naturally. Then the question arises, why partly of family business choose to adopt e-commerce and the rests of it do not. Even though, they are facing relatively similar market challenge, thus, it still needs to be examined until now (Bouniemi and Kawalek, 2008).

Based on the arguments above, this study is conducted with the aim to see the important factors that affect the intention of e-commerce adoption in family business SMEs. SMEs are interesting to be studied because the e-commerce adoption is usually carried out by large-scale enterprises, whereas SMEs are still reluctant to adopt it (Auger and Gallaugher 1997; Thong and Yap 1995; Zank and Vokurka 2003). The benefits of the internet by providing location and time flexibility and ease of communication will help small companies to attain efficiency and cost saving. Previously, this only can be found on large scale enterprises (Iacovou et al. 1995; Lenzenecker et al. 1997). Therefore, with the existence of e-commerce, SMEs are also alleged to be able to enjoy its benefits.

Research about the adoption of e-commerce can be explained with the framework developed by Tomatzky and Fleischer (1990). The framework is known as Technology-Organization-Environment (TOE). TOE framework considered to be an integrative framework which provides a basic holistic theory and guidance in the study of information technology adoption / diffusion. In this framework, there are three aspects of the company which affect the adoption of technological innovations; technological aspects, organizational aspects, and environmental aspects. Technological aspects are related to technology that is relevant with the company. The organizational aspects are related to the resources of the company, which is indicated by the size of the company and the complexity of the managerial structure of the company. Afterwards, the environmental aspects refer to the other parties around the company, such as competitor, suppliers, and the government (Zhu et al., 2002).

TOE theory has also been tested and validated by various studies (such as Ramdani et al. 2013, Olivera and Martins 2010, Zhu et al., 2003, Premkumar and Robert 1999, Iacovou et al. 1995). Moreover, TOE framework is considered as a generic theory from the adoption / diffusion of technology (Zhu et al. 2003). The identification of the factors used in the TOE framework shows that there are several inconsistency, thus providing a gap for the further research. This inconsistency are 1) relative advantage effect toward the intention of the technology adoption, several studies showed that relative advantage has an effect towards the intention for technology adoption (Rahayu & Day, 2015; Wang & Ahmed, 2009; Iacovou et al., 1995), but the research conducted by Huy et al. (2012) shows that relative advantage has no effect toward the intention for technology adoption; 2) organizational readiness effect toward the intention for technology adoption, the research
conducted by Huy et al., (2012), Ramdani et al., (2013), and the research conducted by Jecovou et al., (1995) shows that organizational readiness has an effect toward the intention for technology adoption, whereas the research conducted by Wang & Ahmed (2009) shows that organizational readiness has no effect toward the intention for technology adoption; 3) competitive pressure effect toward the intention for technology adoption, several researches show that competitive pressure has a significant effect toward the intention for technology adoption (Wang & Ahmed, 2009; Jecovou et al., 1995), and several researches also showed an insignificant result (Jeon et al., 2006; Ramdani et al., 2009).

An argument that can be offered for the inconsistency in result finding is by adding another variable as the moderation (Mathieu & Zajac, 1990). The research conducted by Wang & Ahmed (2009) has found moderation factors in the context of the TOE framework that is the orientation of business strategy used by the person who running a family business. The orientation of strategy becoming a factor that needs to be considered because the characteristic of the family business that is idiosyncratic. The business orientation in the family business shows its uniqueness comparing with the companies that has value maximizing orientation in professional business management (Sharma et al., 1996).

This study will be conducted by using SMEs in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area as a research object. SMEs in DIY is developing quite well. This is supported by the statement of Baswir (1998) who states that industrial enterprises in Yogyakarta area are mainly SMEs. The DIY Region is one of many cities with creative industries, thus this city is appropriate to be the research object. This business type has a high opportunity to adopt e-commerce.

Literature Review and Hypothesis Development

1. TOE (Technology – Organisation - Environment)

TOE framework that developed by Tornatzky and Fleischer (1990) is considered as an integrative framework that gives holistic basic theory for researches in the adoption or diffusion of Information and Communication Technology (ICT). TOE, typically evaluates the various technology that is related with the organization and environmental factors that will simplify the process of adoption or diffusion (Ramdani et al., 2013). TOE has been widely used to describe the process of adoption of several innovation including the organizational system (Mishra et al., 2007), and e-business (Zhu et al., 2006). A meta-analysis of 75 researches that has been done by Tornatzky and Klein (1982) provides 10 of the most frequently used characteristic that is related to adoption process, namely relative advantage, complexity, communicability, divisibility, cost, profitability, compatibility, social approval, triability and observability.

TOE framework is consistent with the opinion of Rogers (1983) that discuss about diffusion of innovation (DOI) theory. This theory is also focused on the characteristics of organization both internally and externally, as well as the characteristics of technology as the diffusion stimulant of new technology. Many studies that have been conducted identify technology as an important factor and key to achieve the successful adoption of information system (Crook and Kumar, 1998; Grover, 1993; Zhu et al. 2002; Shaw and Chang, 2005).

The assumption adopted in this study is technology as an adoption driver, thus, the competency of technology will positively affect the intention of e-commerce adoption process. The companies that have high capability will reflect company readiness to apply e-commerce adoption. Factor that identified as inconsistent in technology context is relative advantage. Rogers (1983) defines relative advantage as relative benefit from an
innovation which is considered as a better idea. In relation with technology, Rogers (1983) also provides an explanation that relative advantage is a degree where technological factor is perceived to generate greater benefit for company. The assumption of benefit refers to the return and possible benefits that will be earned from e-commerce adoption in organization (Tiago and Maria, 2010; Iacovou et al., 1995). Several researchers use this variable and get significant result (Premkumar, G and Robert, M, 1999; Looi, 2005; To and Ngai, 2006; Al-qirim, 2007; Sparling et al., 2007; Wang and Ahmed, 2009, Ramdani, et al., 2009; Scupola, 2009; Oliveira and Martin, 2010; Ghobakhlo et al., 2011; Gangwar et al., 2015). From the analysis above, the hypothesis proposed is:

H1: relative advantage has a significant positive effect on the intention of e-commerce adoption in family business

In organization context, Zhu et al., (2003) measure organizational readiness with firm scope and firm size. Firm scope strongly linked with company ability to invest in the information technology (Dewan et al., 1998; Teece, 1997). Firm scope will encourage company to adopt e-business. This condition will place firm scope as predictor in the process of e-commerce adoption, with an assumption of, the more comprehensive the firm scope thus the company internal coordination expense will be more expensive (Gurbaxani and Whang, 1991), inventory and material expense also will be more expensive (Chopra and Meindl, 2001). Next assumption is related with e-commerce adoption, company with wider firm scope will have opportunity to get higher benefit with e-commerce adoption, compared to the traditional business process (Levenburg et al., 2006). Company size (firm size) consistently known as a factor that influences e-commerce adoption (Darrampour, 1992). Related with e-commerce adoption, big companies have several benefits or advantages compared with small companies. The advantages are, big companies have more resource to simplify this adoption, more likely to achieve economies of scale, and it has bargaining power with business partner to adopt the technology. This is in line with the argument of Iacovou et al., (1995) who states that organizational readiness is related with financial level and technological resources from company. Both factors are necessary to be considered because small companies tend to get lack and weak resources, which is needed for doing the adoption. This, in turn will restrict the capability to receive benefit from technology. Thus, the next hypothesis is:

H2: organization readiness has a significant positive effect on the intention of e-commerce adoption in family business

Furthermore in environment context, Zhu et al., (2003) identify company’s environmental aspect indicators that can affect e-commerce adoption that are consumer readiness, competitive pressure, and lack of trading partner readiness. In this research, a factor that will be tested is competitive pressure. This is due to the literature review result which shows that the result of previous research on this variable is remains inconsistent. The level of competitive pressure is a condition of the level of competition that acts as the adoption driver (Crook and Kumar, 1998; Grover, 1993; Zhu et al., 2003; Iacovou, et al., 1995). This pressure is derived from competitors or companies’ external factor, which drives companies to adopt new technology in order to survive in business. The next indicator is the lack of business partner readiness or trading partner readiness. According to Zhu et al., (2003), company that decides to apply e-commerce adoption must be supported by business partner readiness in companies’ value chain to apply such adoption too. Thus, the system that is developed by the companies will be compatible with its business partner’s system. This provides a conception that the readiness or unreadiness of business partner will affect companies’ e-commerce adoption process. Therefore, the next hypothesis is:
H3: competitive pressure has a significant positive effect on the intention of e-commerce adoption in family business

Family business' strategic orientation

The definition of strategic orientation is a company's strategy that aims for creating appropriate behavior in order to achieve excellent performance (Zhou et al., 2005). Family business often shows idiosyncratic character due to the existence of family relationship and business (Sharma et al., 1996). Idiosyncratic character will give different orientation of family business strategy compared to professionally managed company. Family business basically can be classified based on organizational value such as family-centered business or business-centered families (Singer and Donohu, 1992). Moreover, family business is more conservative and reluctant to change (Hall et al., 2001). The classification of family business is also expressed by Birley et al., (1999), that categorized into 3 different clusters: (1) Family rules group (family oriented business) where business decisions always linked with the existence of family, family possession protection and safeguarding the reputation of family becomes important thing. (2) The Family out group (business oriented company) that is opposite of Family rules group, where the focus of this family business focused on business activities. This type of orientation is concerned about emerging issues such as the adoption of new technology, business strategy growth, even opening up for external investors, and (3) The Family-Business Jugglers (company with balanced orientation), this orientation does not clearly articulate on which side of orientation the business lean on. The characters of these orientations are supposed to be the important factors that affect the decision taken by family business to apply the e-commerce adoption or not.

This company's strategy also gives a framework for decision making and it will affect the behavior that will have an impact on innovation (Miles and Snow, 1978). According to Auger et al., (2003) entrepreneur companies who have a focus on the future, will have a more proactive and aggressive, passionate pursuit toward new opportunities, and more courageous to take a risk to find innovative solution in facing the challenges. In the literatures about SMEs, several study found that companies with the entrepreneur strategy will experience sales growth (Freel, 2000; Shirk, 2003), have more positive attitudes toward the development of internet, and will be a first mover in e-business (Auger et al., 2003).

Strategic orientation on family business provides a probability to moderate relationship between relative advantage and e-commerce adoption intention. This is based on tendency towards companies' orientation. Based on the clustering such as proposed by Birley et al., (1999), business-oriented companies will tend to prioritize some initiative affairs, which is related to the business. That initiative can be in the form of the technology utilization, with awareness that this adoption would give benefit for business. The benefits earned may include the reduction of transaction cost, cash flow improvement, inventory cost reduction, and so forth. Therefore it will create competitive advantage. On the contrary, family-oriented business, tend to prioritize family's welfare, while other problems that arises related to expense and other risk are ignored (Wang and Ahmed, 1999). Such orientation tends to make the adoption activity get delayed, until in a certain point where the owner is convinced about the benefit of technology's adoption.

There is also a probability that strategic orientation could interacts with organizational readiness variable in the adoption process. Business-oriented companies tend to have more support from organizational side. It starts with better employees support from the labor and managerial personnel. This is because right from the recruitment process employees are selected based on their ability and the conformity with the job, instead of family closeness. This orientation will simplify the development of technology.
In contrast, family-oriented companies will hire employees based on closeness of the family and not based on competency. Whereas, according to Grable and Lytton (1999) education level and competence become an important discriminant for business decision making.

Competitive pressure can also interact with the strategic orientation of family business. Orientation that is centered toward family or business affects the ability to receive pressure from the outside party. Orientation that centered on family tends to have limited network and very centered on the owner (Wang et al., 2004). Concentration of ownership creates an information constraint that related with the limited and incomprehensive competitive pressure. Thus, the analysis taken to solve problems tends to be unsatisfied and centralistic toward the owner (Casson, 2005). This condition will create difficulty for the company to adopt new technology, although in fact there is external pressure that creates demand on the technological change. In contrast, company with business as its main orientation will give more priority for the transformation in order to maximize profit (Drozdow and Carroll, 1997).

With the explanations on the above theories' perspective, thus the proposed hypotheses are:

H1: Strategic orientation of family business moderates the effect of relative advantages toward the intention of e-commerce adoption.

H2: Strategic orientation of family business moderates the effect of organization readiness toward intention of e-commerce adoption.

H3: Strategic orientation of family business moderates the effect of competitive pressure toward intention of e-commerce adoption.

![Research Design Diagram]

Figure 1. Research Design

Research Methods

1. Sample
The sample in this study are the owner of family businesses of Small Medium Enterprises in Yogyakarta, or 101 respondents.

2. Variable Measurement
   a. Intention to adopt e-commerce adoption
      Intention to adopt e-commerce is measured with 3 statements which are adopted from Ajzen (2006).
   b. Relative Profit

2349
The variable relative profit is measured using 4 items, which are adopted from Premkumar and Robert (1999).

c. **Organization Readiness**  
The organization readiness is measured using 9 items, which are adopted from Wang and Alme (2009).

d. **Competitive Pressure**  
Competitive pressure is measured using 4 items which are adopted by Zhu et al. (2003) and Turban (2004).

e. **Strategic Orientation**  
The measurement of Strategic Orientation is adopted from Wang and Alme (2009). The variable is measured by providing a simple statement about two companies condition. For example, A is a Family-Oriented business and B is a Business-Oriented firm. Respondents were asked to give a value distribution of 100 points between A and B companies based on respondent’s perspective on their company condition compared to the condition of company A and B that had been described. It’s prohibited to give a same value for company A and B; the measurement of Family-oriented business Strategy is performed using dummy, 0 for Family-Oriented business and 1 for Business-oriented firm.

**Result**

1. **Research Instrument Test**  
Validity testing is performed to four main variables in this research, which are relative profit, organization readiness, competitive pressure, and intention to adopt e-commerce. Meanwhile the strategy orientation variable could not be tested because it is an “observable variable” not a “latent variable” which needs an indicator.

Based on the result of validity testing, there are 6 non-valid items that will be excluded from the analysis, 1 item from relative profit statement, 3 items from organization readiness statements, and 2 items from competitive pressure statements.

From the reliability testing, the results are: the reliability of relative profit is 0.610; the reliability of organization readiness is 0.796, the reliability of competitive pressure is 0.699, and the reliability of intention to adopt e-commerce is 0.707. Hypothesis Test

This research uses moderated regression analysis method to test the hypotheses 1-6. Table 1 shows three regression models tested. Model 1 examines the influence of independent variable, Relative Profit, Organization Readiness, and competitive pressure on the intention to adopt e-commerce. Therefore, the first, second, and third hypothesis are supported. Model 2 shows the business strategic orientation as moderating variable has no significant effect on the intention adopt e-commerce. Model 3 shows business strategic orientation business only moderate the effect of competitive pressure on the intentions to adopt e-commerce, while the influence of relative advantages and Organization Readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, according to the result the fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

<table>
<thead>
<tr>
<th>Table 1. Result of Moderated Regression Analysis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention to Adopt E-Commerce Ad</strong></td>
</tr>
<tr>
<td><strong>Model 1 (t)</strong></td>
</tr>
<tr>
<td>Relative Profit (RA)</td>
</tr>
</tbody>
</table>

2350
Organization Readiness (OR)
Competitive Pressure (CP)
Strategic Oriented Business (OSB)
RA x OSB
OR x OSB
CP x OSB
\( \text{AR}^2 \)
\( \text{R}^2 \)
Adjusted \( \text{R}^2 \)
F

<table>
<thead>
<tr>
<th></th>
<th>3.198*</th>
<th>3.298*</th>
<th>2.415*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.756*</td>
<td>2.658*</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>0.989</td>
<td>-0.284</td>
<td>0.622</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.330</td>
</tr>
<tr>
<td></td>
<td>-0.284</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.882*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.283</td>
<td>0.007</td>
<td>0.066*</td>
</tr>
<tr>
<td></td>
<td>0.283</td>
<td>0.290</td>
<td>0.355</td>
</tr>
<tr>
<td></td>
<td>0.260</td>
<td>0.260</td>
<td>0.307</td>
</tr>
<tr>
<td></td>
<td>12.731*</td>
<td>9.791*</td>
<td>7.321*</td>
</tr>
</tbody>
</table>

Source: Primary Data-Processed, 2016
* p<0.05

Discussion

The results show Relative Profit affects the intention to adopt e-commerce. Manager’s perception regarding the benefits to be gained with the use of technology will enhance their intention to adopt the technology, including e-commerce. This is consistent with the findings of Premkumar, G and Robert, M (1999); Looi (2005); To and Ngai (2006); Al-ghnim (2007); Sparling et al. (2007); Wang and Ahmed (2009), Ramdani, et al. (2009); Scapola (2009); Oliveira and Martin (2010); Ghobakhlo et al. (2011); and Gangwar et al. (2015) which shows that the Relative Advantage have a positive influence on the intention to adopt the technology.

The influence of organizational readiness in the adoption of e-commerce is supported in this study. This phenomenon can occur because the company that has sufficient resources, in terms of financial and human resources will be easier to adopt the technology, including e-commerce. Adoption of technologies by companies that have sufficient resources will be more likely to achieve economic scale and improve the bargaining power to the business partner for technology adoption. It supports research conducted by Huy et al., (2012), Ramdani et al., (2013), as well as laeovou et al., (1995) which show that organization readiness affects the intention to adopt technology. However, this result is contradictory with the result of Wang and Ahmed (2009) study which does not support the influence of organization readiness in adopting e-commerce. This inconsistence in very likely to occur because organization readiness in preparing the appropriate technology and financial sources is different in each company.
The effect of competitive pressure on the intention to adopt e-commerce is supported in this study. This phenomenon takes place due to the existence of pressure from competitors to adopt new technology in order to continue their business. The result of this study support the study performed by Wang & Ahmed (2009) and Iacovou et al. (1995) which show that competitive pressure affects the intention to adopt technology. The fact shows that family business get more pressure from external parties to be able to execute transaction through internet or e-commerce, and the adoption is not performed due to manager's self awareness. This is in line with the argument of Rogers (1983) who states that family business rarely become an early adopter. Thus, when the pressure from external parties demanded changes and innovation, family business must take a decision whether the technology adoption will provide benefits, which in turn will leads to metamorphic changes.

This study result shows that business strategic orientation does not moderate the effect of relative profit and organization readiness on e-commerce adoption. This shows that business strategic orientation implemented by company, both family oriented or business oriented, do not clarify (strengthen or weaken) the effect of relative profit and organization readiness on the intention to adopt e-commerce. The result of this study also shows that business strategic orientation moderates the effect of competitive pressure on the intention to adopt e-commerce. The moderation effect is positive, which means that the effect of competitive pressure will be greater on the business oriented companies than family oriented companies. The family oriented companies tend to have narrower network and is highly centered on the owner (Wang et al., 2004). The concentration of power on the owner may lead to the emergence of information barrier in its relation with competitive pressure, thus the analysis of problem solving tend to be less satisfying and is centralistic in owner (Casson, 2005). This condition will makes company find difficulty in adopting the new technology even if the pressure from external parties demanded company to perform changes. Contrary, business oriented company will prioritized the changes to maximize their profits (Drozdzow and Carroll, 1997).

Conclusion, limitation, and suggestion

1. Conclusion

The conclusion of hypothesis testing result shows that relative profit, organization readiness, and competitive pressure have a significant effect on the intention to adopt e-commerce. The first, second, and third hypothesis is supported. Family-oriented business strategy as moderation variable does not have a significant effect on the intention to adopt e-commerce. Family-oriented business strategy only moderates the effect of competitive pressure in the intention to adopt e-commerce. While the effect of relative profit and organization readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, it means that fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

2. Limitation and suggestion

a. This research only shows a few inconsistency in variables from the previous research. It is possible to get several factors which could be used for further research and to re-test the moderation factor used. This research only focused in Sleman Bantul and Yogyakarta area. It's rather complicated to make a general conclusion in Yogya province, researcher is suggested to consider about expanding region and distribution of sample research.

c. Future research need to consider industry cluster in family business to generate a more accurate result.

2352
d. In testing the hypotheses, researchers need to consider the lost predictor items, especially in competitive pressure hypothesis.

**Bibliography**


Hong, W., and Zhu, K., 2006. Migrating to internet-based e-commerce: factors affecting e-commerce adoption and migration at the firm level. Information & Management. Vo1.43 No. 2, pp. 204-21


Niehn Linda S; Keila Tyner; Mack Shelley and Margaret Fitzgerald. 2010. Technology adoption in small family-owned businesses: accessibility, perceived advantage, and


DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS MODERATING VARIABLE IN FAMILY BUSINESS

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH: PROSIDING*

Judul Karya Ilmiah (paper) : Determinant of Intention of E-Commerce Adoption and Strategic Orientationas Moderating Variable in Family Business
Jumlah Penulis : 2 Orang (Muhamad Kholid Arif Rozak, Mugi Harsono)
Status Pengusul : Penulis pertama / penulis ke 2
Identitas Prosiding :
   a. Nama Prosiding : Advances in Global Business Research
   b. ISBN/ISSN : 1549-9332
   c. Tahun Terbit, Tempat : 26 - 28 November 2016, Solo
   Pelaksanaan
   d. Penerbit/organiser : AGBA US
   e. Alamat repository : https://repository.feb.uns.ac.id/llhatpdf.php?lokasi=publikas
   PT/web prosiding
   f. Terindeks di (jika ada) :

Kategori Publikasi Makalah : □ Prosiding Forum Ilmiah Internasional .................................................................
 (beri * pada kategori yang tepat) □ Prosiding Forum Ilmiah Nasional .................................................................

Hasil Penilaian Peer Review :

<table>
<thead>
<tr>
<th>Komponen Yang Dinilai</th>
<th>Nilai Maksimal</th>
<th>Prosiding 15</th>
<th>Nilai Akhir Yang Diperoleh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internacional</td>
<td>Nasional</td>
<td></td>
</tr>
<tr>
<td>a. Kelengkapan unsur isi paper (10%)</td>
<td>1,5</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>b. Ruang lingkup dan kedalaman pembahasan (30%)</td>
<td>4,5</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)</td>
<td>4,5</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>d. Kelengkapan unsur dan kualitas terbitan/prosidings (30%)</td>
<td>4,5</td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong> = (100%)</td>
<td>15</td>
<td></td>
<td><strong>10.5</strong></td>
</tr>
</tbody>
</table>

Nilai Pengusul = 40% x 10.5 = 4.2 (Penulis kedua)

Catatan Penilaian artikel oleh Reviewer :

a. Kelengkapan dan kesesuaian unsur isi artikel :
   Artikel ini sudah menjelaskan secara singkat tentang unsur-unsur yang wajib ada di dalam publikasi karya ilmiah.

b. Ruang lingkup dan kedalaman pembahasan :
   Pembahasan mencakup keseluruhan unsur atau variabel penelitian dengan berorientasi pada pencapaian tujuan penelitian.

c. Kecukupan dan pemutakhiran data/informasi dan metodologi :
   Data telah mencukupi untuk keperluan pengujian hipotesis dengan metode yang sesuai.

d. Kelengkapan unsur dan kualitas terbitan :
   Kualitas terbitan sudah memenuhi persyaratan publikasi hasil seminar internasional.

e. Indikasi Plagiat :
   Similarity Index 22%, tidak ada indikasi plagiasi.

f. Kesesuaian bidang ilmu :
   Materi bahasan sesuai dengan bidang ilmu manajemen.

Surakarta, ...................................

Prof. Dr. Hanik Sri Runing Sawitri, M.Si
NIP. 195908031986012001
Jabatan : Guru Besar
Pangkat, Gol Ruang : Pembina Tingkat I / IV/b
Unit Kerja : Fakultas Ekonomi dan Bisnis
Bidang Ilmu : Manajemen

*Disini oleh dua Reviewer secara terpisah
**Cetak yang tidak perlu
<table>
<thead>
<tr>
<th>Komponen Yang Dinilai</th>
<th>Nilai Maksimal</th>
<th>Prosiding 15</th>
<th>Nilai Akhir Yang Diperoleh</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Kelengkapan unsur isi paper (10%)</td>
<td>1,5</td>
<td>1,5</td>
<td></td>
</tr>
<tr>
<td>b. Ruang lingkup dan kedalaman pembahasan (30%)</td>
<td>4,5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>c. Kecepatan dan kemutakhiran data/informasi dan metodologi (30%)</td>
<td>4,5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)</td>
<td>4,5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total = (100%)</strong></td>
<td>15</td>
<td>13,5</td>
<td></td>
</tr>
</tbody>
</table>

Nilai Pengusul = 40% x 13,5 = 5,4 (Penulis kedua)

### Catatan Penilaian artikel oleh Reviewer:

a. Kelengkapan dan kesesuaian unsur isi artikel:
   - Unsur isi artikel lengkap dan sesuai

b. Ruang lingkup dan kedalaman pembahasan:
   - Ruang lingkup dan pembahasan mendalam

c. Kecepatan dan pemutakhiran data/informasi dan metodologi:
   - Data dan metodologi mutakhir, namun belum menyampaikan tempat penelitiannya

d. Kelengkapan unsur dan kualitas terbitan:
   - Unsur dan kualitas terbitan baik

e. Indikasi Plagiat:
   - Similarity Index 22%

f. Kesesuaian bidang ilmu:
   - Sesuai dengan bidang ilmu

---

Prof. Dr. Asri Laksmi Riani, M.S
NIP. 195901301986012001
Jabatan : Guru Besar
Pangkat,Gol Ruang : Pembina Utama Madya / IV/d
Unit Kerja : Fakultas Ekonomi dan Bisnis

---

*Dinilai oleh dua Reviewer secara terpisah
**Coret yang tidak perlu