

Techno-Entrepreneurial Relationship Marketing to ignite the SMEs Marketing Performance in Indonesia

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Abstract

The main purpose of this study are to propose and examine a framework of Techno-Entrepreneurial Relationship Marketing (TERM) to bridge the gap between entrepreneurial orientation and firm performance. Especially, this study exploring the role of techno-entrepreneurial relationship marketing, responsiveness capability, and interaction proactiveness on increasing marketing performance in the context of Small and Medium Enterprises (SMEs). This study was conducted by survey method through distributing the questionnaires to 100 owners and managers of SMEs in Indonesia. By using structural equations model analysis to examine the proposed model, this study indicated that both information technology adoption and entrepreneurial orientation did not influenced techno-entrepreneurial relationship marketing; techno-entrepreneurial relationship marketing influenced responsiveness capability, interaction proactiveness, and marketing performance significantly.

Keywords: entrepreneurial marketing, relationship marketing, entrepreneurial orientation, marketing performance, SMEs.

I. Introduction

Many authors recognize that entrepreneurial orientation plays an important role in increasing firm performance, especially in small and medium size business. Some empirical studies have found that firms with a more entrepreneurial orientation perform better than firms with low entrepreneurial orientation. Wiklund and Shepherd (2003) examined the relationships between entrepreneurial orientation, knowledge-based resources, and firm performance by used 384 Swedish small and medium-sized businesses as the research sample. They found that entrepreneurial orientation positively influenced firm performance and they also indicated that knowledge-based resources were positively related to firm performance and entrepreneurial orientation enhanced the relationship between knowledge-based resources and firm performance. Wiklund and Shepherd (2005) also highlight the role of entrepreneurial orientation, access to capital, and environmental dynamism in enhance small business performance. By using longitudinal design research with 413 Swedish firms as the sample, they indicated that entrepreneurial orientation positively influenced small business performance. They also found that high entrepreneurial orientation provided the ability for the business to explore new opportunities that could differentiated the business from other firms and created a competitive advantage. Keh *et al.* (2007) investigated the effect of entrepreneurial orientation and marketing information on small and medium-sized enterprise performance by using 294 Singaporean entrepreneurs. They found that entrepreneurial orientation influenced firm performance both directly and indirectly. In their study, entrepreneurial orientation plays an important role on the acquisition and utilization of marketing information that ultimately increased firm performance. Li *et al.* (2009) explored the relationships between entrepreneurial orientation, knowledge creation process, and firm performance with using survey data

of 165 entrepreneurs in Taiwan. They indicated that entrepreneurial orientation was positively influenced firm performance and knowledge creation process plays a mediating role in the relationships between entrepreneurial orientation. All of these studies indicated that entrepreneurial orientation positively influenced firm performance in the context of SMEs.

While some studies indicated that entrepreneurial orientation positively influenced firm performance, the other studies failed to prove this positive relationship. Runyan *et al.* (2008) investigated the effect of entrepreneurial orientation and small business orientation on small business performance. By using a sample of 267 small business owner in USA, they found that entrepreneurial orientation did not influenced firm performance while small business orientation influenced firm performance significantly. Hermann *et al.* (2010) examined the relationship between entrepreneurial orientation and business performance. They used 85 small and medium-size business in Austria as the sample. They indicated that entrepreneurial orientation may have a negative effect on firm performance in certain configuration of business environment as well as access to financial capital. Based on research gap, this study aimed at proposes a framework of Techno-Entrepreneurial Relationship Marketing (TERM) to bridge the gap between entrepreneurial orientation and firm performance. This study further examines the framework in the context of Small and Medium Enterprises (SMEs).

SMEs basically have very important contribution for economic growth in a country. However, some factors such as financial capital inadequacy, difficulty to market and to sell the products, lower qualified of human resources, and the poor of management can be inhibited SMEs to grow. The difficulty to sell the products become the major barrier because although SMEs owners have spend more money to promote their products, but firm performance is not increase. On the other hand, activities to market and to sell the products in SMEs must be undertaken in order to grow and sustain in the uncertainty business

environment (Reijonen and Laukkanen, 2010; Franco *et al.*, 2014). Therefore, we used SMEs to examine the role of Techno-Entrepreneurial Relationship Marketing (TERM) on increasing firm performance.

II. Literature Review and Hypotheses Development

2.1. Resource-Based View Theory

Resource-Based View (RBV) theory which was introduced by Barney (1993) proposed that the firms must have capability and resources to build sustainable competitive advantage and superior performance. Firms resources include all assets both intangible and tangible assets controlled by a firm that enable the firm to conceive of and implement strategies that increase its efficiency and effectiveness. Intangible assets refers to human capital resources and organizational capital resources, while tangible assets refers to physical capital resources. The physical technology used in a firm is one of tangible assets that owned by the firm.

Based on RBV, a firm is said to have a sustainable competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy (Barney, 1993). A firm resources must have four attributes namely valuable, rare among a firm's current and potential competition, imperfectly imitable, and not substitutable (Barney, 1993; Barney, 2001).

Research on RBV more focus in larger firms, yet smaller firms like SMEs also face the need to acquire critical resources to create sustainable competitive advantage (Barney, 2001). Rangone (1999) presented RBV of an SMEs sustainable competitive advantage and proposed a model of SMEs sustainable competitive advantage. Based on 14 case studies of SMEs in different industries, she emphasized that proposed that SMEs sustainable competitive advantage can be built based on three basic capabilities namely innovative capability, production capabilities, and market management capability. Entrepreneur as a special resource in SMEs and therefore he/she has an important role to build these capabilities.

2.2. Entrepreneurial Orientation

Entrepreneurial orientation reflects a firm's strategic orientation, capturing specific entrepreneurial aspects of decision making styles, methods, practices (Lumpkin and Dess, 1996). Entrepreneurial orientation can be understood as the managerial processes that enable some firms to be afore of the competition because entrepreneurial orientation facilitates firm action based on early cues from its internal and external environments (Lumpkin and Dess, 1996). Entrepreneurial orientation can support firms to be innovative by creating and introducing new products and technology and proactive by create first-mover advantages like target premium market segments and skim the market among the competitors (Wiklund and Shepherd, 2003).

Some authors stated that entrepreneurial orientation has three dimensions namely innovativeness, proactiveness, and risk-taking (Wiklund and Shepherd, 2003; Wiklund and Shepherd, 2005; Runyan *et al.*, 2008; Keh *et al.*, 2007). Innovativeness refers to a predisposition to promote new ideas, novelty, experimentation, and creative processes. Innovativeness derived from established practices and technologies. Proactiveness reflects a posture of anticipating and acting on future wants and needs in the marketplace. Risk-taking refers to a willingness to compliance to commit large amounts of resources to projects where the cost of failure may be high and projects that the outcomes are unknown. While Lumpkin and Dess (1996)

proposed that entrepreneurial orientation has five dimensions that were autonomy, innovativeness, proactiveness, risk-taking, and competitive aggressiveness. Autonomy reflects the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion, where as competitive aggressiveness is related to a firm's tendency to directly and intensely challenge its competitors to achieve entry or improve position or to be outperform in industry rivals in marketplace.

In the context of small and medium size business, entrepreneurial orientation plays an important role in increasing firm performance. Previous studies confirmed that firms with a more entrepreneurial orientation perform better than firms with low entrepreneurial orientation (Wiklund and Shepherd, 2003; Wiklund and Shepherd; 2005; Keh *et al.*, 2007; Li *et al.*, 2009).

2.3. Relationship Marketing

Philosophy of business has shifted from the production orientation to the product orientation to the selling orientation and finally the relationship marketing orientation (Sin *et al.*, 2002). The concept of relationship marketing was introduced by Berry (1983) who defined relationship marketing as attracting, maintaining, and enhancing customer relationships. Some authors defined concept of relationship marketing differently. In the narrow context, Berry and Parasuraman (1991) defined relationship marketing as attracting, developing and retaining customer relationships. While in the broader context, Gronroos (1994) defined relationship marketing as identifying, establishing, maintaining, and enhancing relationships with customers and other stakeholders or parties at a profit by mutual exchange and fulfillment the promises. The keys of relationship marketing are developing, maintaining, and enhancing the relationships between firms and their customers. Potential benefits for the business that implement relationship marketing include improve customer loyalty and retention, long term customer relationships, increased customer service, higher quality and more frequent customer contact, personalized products and services, increased delivery of customer value, enterprise-wide participation in marketing, and enterprise-wide responsibility for quality (Doherty and Lockett, 2008).

Gronroos (1994) proposed that successful relationship marketing practice requires firms to view their self as a service business, view their self as a process management perspective and partnerships, and develop partnerships as well as networks. He also identified three tactical elements of relationship marketing strategy namely direct contacts with customers, database creation, and customer oriented service system. Sin *et al.* (2002) proposed that relationship marketing include six components namely trust, bonding, communication, shared value, empathy, and reciprocity.

Regarding the role of relationship marketing on business performance, Yau *et al.* (2000) indicated that relationship marketing and market orientation were positively influenced on business performance in manufacturing and service industries in Hong Kong. Particularly, they found that the relationship between relationship marketing on business performance in manufacturing industries stronger than service industries. Sin *et al.* (2002) also confirmed that relationship marketing increased business performance which included sales growth, customers retention, market share growth, and ROI on 279 service firms. Although some authors stated that relationship marketing appear to be more appropriated to larger firms than smaller firms, but it no means that relationship marketing can not applied in smaller firms like SMEs. Therefore, this study is focused in SMEs to explore the role of relationship marketing, especially in the form techno-entrepreneurial relationship marketing to bridge the gap between entrepreneurial marketing and firm performance.

2.4. Techno-Entrepreneurial Relationship Marketing

Some previous study indicated that entrepreneurial orientation enhanced firm performance in the context SMEs (Wiklund and Shepherd, 2003; Wiklund and Shepherd, 2005; Keh *et al.*, 2007; Li *et al.* 2009). Therefore, it can be said that SMEs with a more entrepreneurial orientation perform better than firms with low entrepreneurial orientation. The emergence of globalization encourage on the greater market opportunities, especially for SMEs to market their products. Consequently, SMEs should not only adopt entrepreneurial orientation but they must also supported by the good relationship marketing in order to increase firm performance. In spite of many researcher emphasize the important role of relationship marketing on business, but the concept of relationship marketing is rarely implemented on SMEs (Gronroos, 2004; Gummesson, 2004).

Relationship marketing emphasize that customer loyalty must be built with great effort in the form of personalization in which the customer become of the core marketing activities and Customer Relationship Management (CRM) as a become the effective means to identify the customer needs and wants. RBV perspectives stated that the physical technology used in a firm is one of tangible assets that owned by the firm. Technology has an important role in supporting all business activities include marketing activities. Innovativeness identified as a dimension of entrepreneurial orientation that related with technological aspect. Therefore, in the era of technology information, Electronic Customer Relationship Management (e-CRM) potentially can help the firms to identify and satisfy the customer needs fastly and properly. In the context of SMEs, e-CRM has the ability to increase customer communication capabilities of SMEs by facilitating more interaction between SMEs and their customers as well as enable the acquisition, management, and analysis of customer information for the basis of marketing decision making (Harrigan *et al.*, 2012). By adopting e-CRM, firm performance can be enhanced since e-CRM facilitates the SMEs to sell their products and reach the broader and larger market faster and easier.

Based on this reasoning, this study proposed the concept of Techno-Entrepreneurial Relationship Marketing (TERM). **TERM is defined as a technology information-based relationship marketing which is characterized by interactive information sharing, customer communication capability, and creating mutual value.** Figure 1 presents the conceptual mapping of Techno-Entrepreneurial Relationship Marketing (TERM).

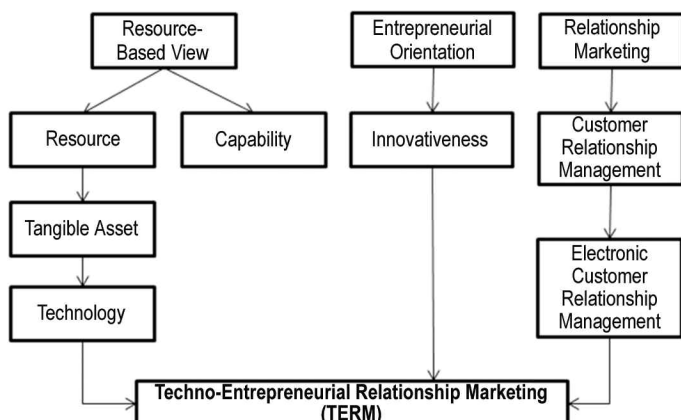


Figure 1. Conceptual Mapping of Techno-Entrepreneurial Relationship Marketing (TERM)

2.5. Information Technology Adoption and Techno-Entrepreneurial Relationship Marketing

Many authors stated that information technology has an important role on business activities that can lead to stronger

business relationships and ultimately increase business performance. Venkatraman (1994) emphasized information technology as an important facilitator of business network redesign in rearranging relationships in the business network to deliver superior products and services. In the context buyer-supplier relationships, Stump and Sriram (1997) indicated that information technology investments indirectly increased buyer-supplier relationships and directly contributed to the reduction of supplier bases. Han (1997) found that information technology was positively influenced on inter-organizational business relationships and that a technological macth and high technology make the relationships much more effective.

Domegan (1996) highlight the role of adoption process of information technology in customer service. She proposed that information technology supported marketing activities include the distribution activities by automated distribution order processing and delivery activities; sales activities by automated routine sales activities and inform the four Ps; and relationship marketing activities that incorporates product benefits, continuous customer contact, and customer retention to obtain online qualitative data about customers and markets that allowed the firm to pursue relationship marketing strategies.

Gabbott and Colgate (1999) proposed that information technology has an important role on relationship management because it can be used to finding and understanding the customers, identified suppliers collaborators, third party service providers, employees, contractors and many other actors in back-stage business process. On the other hand, information technology also can bed used to managing the relationship between firm, customer, supplier, and other actors within the network. The focus of relationship marketing are acquiring benefits and the emergence of increasing satisfaction over time such as improved value cycle namely intrinsic and extrinsic relationship value. Intrinsic relationship values refers to values arising from the product exchanged, while extrinsic relationship values refers to the non economic features of the relationship such as mutual trust or commitment which can enhanced by technology. In the context intrinsic relationship values, the role of information technology include customizing the product offerings and the ability to respond to activities relating to the consumption of the product. While in the context external relationship values, information technology include web-based facilities available for partners to interact with the firm that can lead to enhance partners trust and commitment to the firm. Relationship management by technologically-enabled responsiveness is changing the focus in the relationship marketing from intrinsic to extrinsic relationship values and from only purchase loyalty to Total Relationship Marketing (Gabbott and Colgate, 1999). Therefore, we propose the following hypotheses:

H1: The higher the level of information technology adoption, the greater the degree of Techno-Entrepreneurial Relationship Marketing.

2.6. Entrepreneurial Orientation and Techno-Entrepreneurial Relationship Marketing

The relationship building and maintainance include two important things that are creating value for the business and creating loyal customers (Zontanos and Anderson, 2004). Although the business owners has little competitive advantage, few ways of developing process innovation and operate in a very competitive environment, but if they used their relationship innovatively to add value to customers' perception of business operation, they can success and survive.

Relationship marketing basically related to business networks. The management of innovation literature shows that companies seeking to survive in rapidly changing and/or highly competitive markets are being advised to consider participating in business networks (Chaston, 2000). Chaston (2000)

suggested that the marketing styles namely conservative/transactional orientated companies, conservative/network orientated companies, entrepreneurial/transactional orientated companies, and entrepreneurial/network orientated companies influenced participation of small companies in business networks. Based on his survey in small manufacturing companies, Chaston (2000) indicated that high growth entrepreneurial companies tend to participate in business networks because the membership of a network confers the benefit of increasing the level of organizational learning and higher levels of competence were found for entrepreneurial/network orientated organizations.

Hoang and Antoncic (2003) were reviewed network-based research in entrepreneurship in the context of small to medium-sized firms and found that three essential components of networks include the content of relationships, the governance of relationships, and the structure or pattern that emerged from the crosscutting ties were the key elements to explain the process of network development during entrepreneurial activity. They stated that a key benefit of networks for the entrepreneurial process was the access they provide to information and advice. Therefore, entrepreneurs continue to depend on networks for business information, advice, and problem solving, with some contacts providing multiple resources. They also identified that relationships can also have reputational or signaling content since in the uncertain and dynamic situations under which entrepreneurial activity occurs, resource holders were likely to seek information that helps to gauge the underlying potential of a venture. Therefore, we propose the following hypotheses:

H2: The higher the level of entrepreneurial orientation, the greater the degree of Techno-Entrepreneurial Relationship Marketing.

2.7. Techno-Entrepreneurial Relationship Marketing and Market Responsiveness Capability

Kohli and Jaworski (1990) states that in a market-oriented company will certainly focus on the systems and processes to collect, use and respond to market information obtained. Further, Kohli and Jaworski (1990) provide reinforcement to the company more focus on the aspects of the organization to deliver the value to customers, rather than on individual aspects. The focus should always be placed on the response to listening and responding the customer needs. The company that have a high market responsiveness will be able to adapt quickly to environmental changes conditions (Randall *et al.*, 2003). Market responsiveness can be said as a competency of the company to react quickly to the market needs changes. Based on Giaglis & Konstantinos (2011) noted that the competitive market response is determined by two factors: the effect of the competitive environment and supported by the organizational capabilities. The new innovations and flexibility in responding to the market is a special capability that is owned by an organization.

Information technology can be used by the firm to support marketing activities that include the implementation of relationship marketing, especially in SMEs. TERM which refers to technology information-based relationship marketing which is characterized by interactive information sharing, customer communication capability, and creating mutual value enable the firm to identify the customer needs more easily and quickly so that the firm can respond the customer needs immediately. In the context of SMEs, study conducted by Doherty and Lockett (2008) indicated that companies that used information technology such as in the form of e-CRM as a tool of relationship marketing more effectively in managing their marketing activities such as the sales order process activities in multi-channel environment. Therefore, we propose the following hypotheses:

H3: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the greater the degree of responsiveness capability.

2.8. Techno-Entrepreneurial Relationship Marketing and Interaction Proactiveness

The keys of relationship marketing are developing, maintaining, and enhancing the relationships between firm and its customers. Relationship marketing broadened the domain to focus on exchange relationship and increasing the understanding of relationships between firm and its customers (Gronroos, 1994). Therefore, firm that adopted relationship marketing strategy more focus on building long-term relationship with its customers and this strategy will result the more intensive interaction between firm and its customers.

Advances in technology, especially information technology can facilitate the relationships as well as the interactions between firm and its customers and lead to the greater of customer engagement on firm. Customer engagement on firm has an important role in the creation of value because its focuses on satisfying customers by providing superior value than competitors in order to build customers' trust and commitment in long-term relationships. Engaged customers become partners who collaborate with firm in the value adding process to better satisfy their needs and other customers needs (Sashi, 2012).

Firm can play an active role in the formation of customer communities using internet to serve customers. Interactions among firm and its customers can enhance understanding of customer needs, facilitate modifications to existing products, and support the development of new products to better satisfy customer needs. Social interaction in virtual worlds where users communicate and interact in real time can be used by the firms to connect with their customers, provide information and experiences, and acquire customer input (Tikkanen *et al.*, 2009). Interaction between firm and its customers was becoming the locus of value creation and value extraction because of customer interaction enables customers to participate in the value adding process and collaborate with firm in creating value (Pralhad and Ramaswamy, 2004). Therefore, we propose the following hypotheses:

H4: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the greater the degree of interaction proactiveness.

2.9. Techno-Entrepreneurial Relationship Marketing and Marketing Performance

Previous research have been found that relationship marketing positively influenced firm performance both in manufacturing and service industries. In their study conducted in Hong Kong, Yau *et al.* (2000) found that relationship marketing positively affected firm performance. Moreover, they indicated that the effect of relationship marketing on firm performance more stronger in manufacturing industry rather than service industry. Sin *et al.* (2002) investigated the relationship between relationship marketing on business performance and they indicated that relationship marketing impact business performance which measured by sales growth, customer retention, market share, and ROI. Izquierdo *et al.* (2005) examined the impact of relationship marketing on firm performance in which firm performance measured by market performance and economic performance of the firm. They indicated that relationship marketing that include attraction and loyalty programs was greater on market performance rather than on economic performance. They also found that attracting customers through a good service quality and reaching a good position in the market have greater impact on economic results than loyalty. Therefore, based on some previous research, we propose the following hypotheses:

H5: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the higher the level of marketing performance.

2.10. Responsiveness Capability and Marketing Performance

Customer responsiveness refers to the action taken in response to market intelligence concerning individual needs of target customers (Kohli and Jaworski, 1990). Customer responsiveness consist of value-adding activities such as solving the customers' problems, building relationships with customers, and customizing the offering (Pehrsson, 2014). Regarding the role of responsiveness capability on increasing firm performance, Pehrsson (2014) investigated the relationship between firm's customer responsiveness and firm performance and considered two moderators namely the main competitor's competitive strategy and the firm's age. Based on survey in 350 Swedish industrial firms, he found that firm's customer responsiveness influenced firm performance and both of the main competitor's cost leadership and the firm's age weaken the positive firm performance impact of the firm's customer responsiveness. He concluded that the firm's age and imitates the main competitor's competitive strategy convergence made it difficult for the firm to achieve an advantage based on customer responsiveness provided that the competitor did not change its strategy dramatically. Therefore, we propose the following hypotheses:

H6: The greater the degree of responsiveness capability, the higher the level of marketing performance.

2.11. Interaction Proactiveness and Marketing Performance

Advances in technology have resulted in enhancing chance for interactions between firms and their customers, between customers and other customers, and between firms and other firms. Interaction orientation provide a new direction for the implementation of marketing concept in the context of interactive marketing and it has been found in both business to business and business to consumer firms. Interaction orientation refers to a firm's ability to interact with its individual customers and to take advantage of information acquired from them via successive interactions to attain profitable customer relationships (Ramani and Kumar, 2008).

Interaction orientation consist of four dimensions namely customer concept, interaction response capacity, customer empowerment, and customer value management (Ramani and Kumar, 2008; Yuan and Liu, 2013). Customer concept refers to the conviction that take individual customer as the unit of analysis of every marketing action and reaction; interaction response capability describes the degree that the firm offers successive products, services, and experiences to each customer by dinamically integrating feedback from previous behavioral responses of that specific customer and of other customers collectively; customer empowerment related to the extent that the firm provides its customers facility to connect them with the firm and actively shape the nature of transactions or to connect and work together with the other customers by sharing information and ideas regarding the firm's products and policies; and customer value management refers to the extent that the firm can define and measure the individual customer value and then use it as its guiding metric for marketing resource allocation decisions (Ramani and Kumar, 2008; Yuan and Liu, 2013).

Previous studies indicated that interaction orientation become an important determinant for firms to achieve superior business performance and sustainable competitive advantage in interactive environment. Based on survey of top marketing managers, Ramani and Kumar (2008) identified that firms that adopted interaction orientation obtain some advantages include: the firm was able to attract and retain the most valuable customers, the firm's customers developed into a skilled

resource for the firm, the firm inoculated its customers from competitors by instilling a heightened sense of ownership of the firm among its customers, the firm developed a dynamically shifting portfolio of products and services, the firm developed the ability to foresee customer responses, and the firm exhibited superior aggregate-level business performance because an interaction orientation resulted in a firm dynamically maximizing its profit function at every stage of activity across all its customers.

Study conducted by Yuan and Liu (2013) also confirmed that interaction orientation that include customer concept, interaction response capacity, customer empowerment, and customer value management positively influenced firm's customer-based performance. The positive relationship between interaction orientation and firm's customer-based performance was moderated by the strategic type in which interaction orientation had greater positive effect on customer level profit performance and relational performance for the firms that adopted prospector strategic type than firms that adopted defender, analyzer, and reactor strategic type. Based on customer perspectives, Liang and Zhang (2012) found that interaction orientation has positive effect on customer satisfaction and behavioral intention both in first-time and frequent purchasing. In this context, interaction orientation can be adopted by firms to achieve superior performance with regard to customer factors such as customer loyalty that resulted from customer satisfaction as well as behavioral intention. Therefore, we propose the following hypotheses:

H7: The greater the degree of interaction proactiveness, the higher the level of marketing performance.

2.12. Research Framework

Based on the literature review and hypotheses as explained above, we proposed and examined the research framework that presented in *Figure 2*.

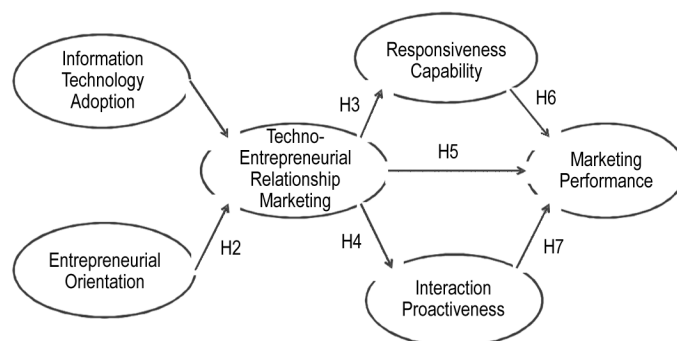


Figure 2.

Techno-Entrepreneurial Relationship Marketing Framework

III. Research Methods

3.1. Subjects

A total of 100 owner and manager of SMEs located in Nusa Tenggara Barat province participated in this study. *Table 1* was presented the description of respondents.

Among the respondents, there were 83 males (83%) and 17 females (17%). Regarding the age, 4% of the total respondents were 20-30 years old; 59% were 31-40 years old; and 37% were above 41 years old. In terms of education levels, 43% of the total respondents had high school level education; 54% had undergraduate college degrees; and 3% had master's degrees. According to the top management status, 96% of the total respondents were owner and only 4% were managed the business by Manager. In perspective of the asset of business, there were 21% had less than IDR 100 million and 79% had more than IDR 101 million.

Table 1. Description of respondents

Item	Description	Frequency N=100	Percentage (%)
Gender	Male	83	83
	Female	17	17
Age	20 – 30 years old	4	4
	31 – 40 years old	59	59
	> 40 years old	37	37
Status	Owner	96	96
	Manager	4	4
Education Level	High School	43	43
	Under graduate	54	54
	Post graduate	3	3
Period of Business	0 – 3 years	23	23
	3.1 – 5 years	52	52
	> 5 years	25	25
Asset	0 – 100 million IDR	21	21
	101 – 1000 million	79	79
	>1000 million IDR	0	0

3.2. Research Procedures

This study used the primary data which were collected through survey method by distributing the questionnaires to the owner and manager of SMEs located in Nusa Tenggara Barat province. The survey was conducted during October until December 2016. The sampling method employed in this study was the non-probability sampling method with the purposive sampling technique. The criteria that were used in this study to select the samples were the SMEs already used the internet technology to manage their business more than 2 years, have enterprise website, and active use the social media.

3.3. Research Instruments and Measurements

The items used in this study were adopted from earlier studies and developed by the authors. Ten-point Likert type scales ranging from 1 = strongly disagree to 10 = strongly agree were used in all measurements of this study. Regarding the validity, this study used construct validity with confirmatory factor analysis for validity testing. While the reliability testing undertaken by composite reliability. Table 2 presented the validity and reliability testing results of research instruments that used in this study.

Table 2. Validity and Reliability Testing Results

Variable	Indicators	Factor Loading	Cronbach's alpha
Information Technology Adoption	- Perceived benefit	0.718	0.902
	- Vast array of information	0.830	
	- Communities of interest	0.754	
Entrepreneurial Orientation	- Innovativeness	0.497	0.701
	- Proactiveness	0.856	
	- Risk-taking	0.896	
Techno-Entrepreneurial Relationship Marketing	- Interactive information sharing	0.685	0.853
	- Customer communication capability	0.732	
	- Creating mutual value	0.645	
Responsiveness Capability	- Speed of response to customer	0.789	0.963
	- Aggressiveness feedback	0.914	
	- Innovativeness of competitive responses	0.902	
Interaction Proactiveness	- Enrich their overall marketing communications mix	0.891	0.835
	- Provide information about the product	0.787	
	- Receive customer feedback	0.844	
Marketing Performance	- Market growth	0.616	0.939
	- Sales revenue	0.737	
	- Net profit	0.757	

Based on the table 2 result that all of path coefficients of latent constructs and the corresponding measured indicators were appropriately high that represented by the standardized loadings ranging from 0.65 to 0.91 and significant. The reliability coefficients and Cronbach's Alpha all exceeded the recommended cut-off value of 0.60 (Pallant, 2010), showing the evidence of acceptable reliability for all of the constructs. The Average Variance Extracted for all constructs were higher than the cut-off level from the standard of 0.50 that suggesting an adequate convergent validity (Hair *et al.*, 2010).

IV. Research Findings

Data in this study was analyzed by the structural equation model analysis with AMOS 21 statistic software. The fit models are indices show an adequate fit between the conceptual model and the data obtained from the survey. Figure 3 presented the results of the data analysis in this study.

Evaluation of Goodness of Fit

Goodness of fit of model analysis in this study was confirmed by the chi-square value of 137,255 at a significance level of 0.252 together with GFI = 0.877, AGFI = 0.835; TLI = 0.985;

CFI = 0.987 and a RMSEA level of 0.029. The RMSEA was lower than the cut-off value of 0.08, suggesting a good model fit (Hair *et al.*, 2010) and further supported by the fit indices of GFI, AGFI, TLI, and CFI were noted as above than 0.90. In technical terms, the results indicate that there was no problem with the structural model. The results in Table 3 also show that all hypotheses received significant support based on the given data.

V. Discussion

Based on the empirical test results of the proposed model can be noted that the TERM structural models are good. The hypotheses H1, H2, and H6 is rejected but did not effect to TERM models to be applied for SMEs' marketing strategy development in Indonesia. The Information Technology Adoption (ITA) and the Entrepreneurial Orientation (EO) as the antecedents of TERM does not support the concept that shown by the results of the empirical test of ITA for 1.83 and EO for 1.31 which is still lower than the standard CR of 1.96. SMEs in Indonesia have been aware of the importance of Information Technology as a major of marketing tool for supporting SMEs and entrepreneurial orientation that has been formed on SME

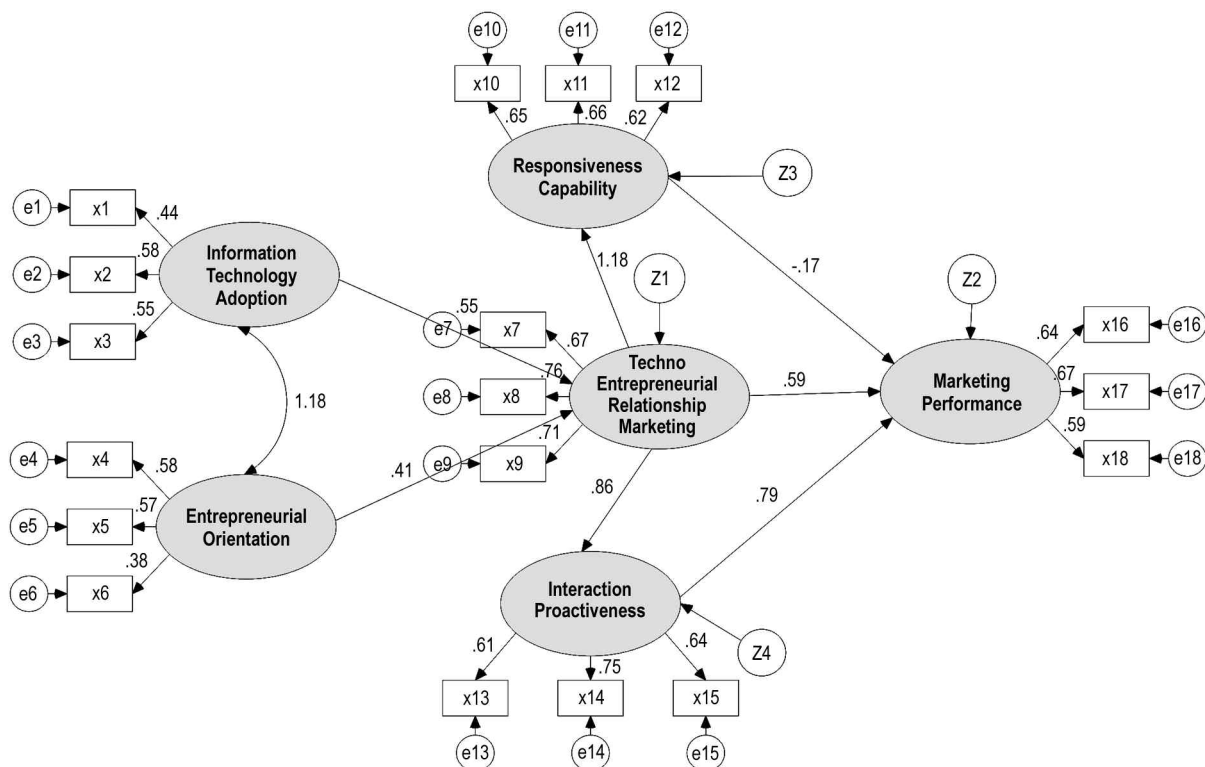


Figure 3. Full Structural Model

Table 3. Hypotheses Testing Results

Hypotheses	Estimate	S.E.	Critical Ratio	P value (≤ 0.05)	Results
H1: The higher the level of information technology adoption, the greater the degree of Techno-Entrepreneurial Relationship Marketing.	0.895	0.488	1.836	0.066	Rejected
H2: The higher the level of entrepreneurial orientation, the greater the degree of Techno-Entrepreneurial Relationship Marketing.	0.744	0.565	1.316	0.188	Rejected
H3: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the greater the degree of responsiveness capability.	1.027	0.138	7.426	0.000	Accepted
H4: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the greater the degree of interaction proactiveness.	0.834	0.149	5.611	0.000	Accepted
H5: The greater the degree of Techno-Entrepreneurial Relationship Marketing, the higher the level of marketing performance.	0.453	0.210	2.164	0.030	Accepted
H6: The greater the degree of responsiveness capability, the higher the level of marketing performance.	-0.154	0.112	-1.381	0.167	Rejected
H7: The greater the degree of interaction proactiveness, the higher the level of marketing performance.	0.626	0.237	2.643	0.008	Accepted

businesses.

According Kannabiran (2010) stated that information technology can basically support the SMEs to reduce the costs in developing internal processes, communicate effectively with customers, and certainly better in terms of the distribution of its products through online; improve productivity (Lymer, 1997); enhance the innovation process (Raymond and Bergeron, 2008); and improve competitiveness (Alberto and Fernando, 2007). Based on the that previous literature, it can be noted that companies that adopt and implement the information technology well is believed to be more innovative and achieve competitive advantage in the business environment. Overall, it can be noted that the TERM model proposed provides as a guidance to SMEs that already have knowledge of the technology and has a strong entrepreneurial orientation to use it as a further marketing strategy by managed their customers better with excellent relationship marketing with combining three variables from the models : Interactive Information Sharing, Customer Communication Capability, and Creating Mutual Value to improve marketing performance. The TERM model is believed to improve the marketing performance of SMEs, but it will be

more powerful if it is supported by Proactiveness Interaction to boost the performance improvement efforts formed with Enrich their overall marketing communications mix, Provide information about the product, and Receive customer feedback.

VI. Conclusions, Managerial Implications, and Suggestions for Future Research

6.1. Conclusion

Marketing is critical to the success of a small business enterprise. However, some factors such as financial capital inadequacy, difficulty to market and to sell the products, lower qualified of human resources, and the poor of management can be inhibited SMEs to grow. The difficulty to sell the products become the major barrier because although SMEs owners have spend more money to promote their products. This study has advanced knowledge by addressing the proposed models of Techno-Entrepreneurial Relationship Marketing (TERM) towards the proactiveness Interaction and responsiveness capability,

and its impact on marketing performance.

Based on the empirical test, it is believed that the research models of TERM is realistic and reliable within the context of SMEs' marketing strategy development in Indonesia as a technology-based relationship marketing information the which is characterized by interactive information sharing, customer communication capability, and creating mutual value. Patrakosol & Lee (2009) conducted research with the aim to test how far the influence of IT to improve customer relations and the performance of the company in a developing country (Thailand) than in developed countries (USA). The results showed that the company's IT capability has positive influence on the company's performance, even more profitable in developing countries (Thailand). The IT use in SMEs in developing countries play a major role with the businesses to integrate the local or global customers and suppliers. Overall, it can be said that the use of IT by SMEs to manage their customers better is possible to improve innovativeness and business performance.

6.2. Implications and Suggestions

Harrigan *et al.*, (2009) stated that the principles of relationship marketing is still rarely applied to SMEs, although many researchers propose a relational approach to marketing (Gronroos, 2004; Gummesson, 2004). In addition, research that links between relationship marketing and entrepreneurship are also still lacking (Zontanos and Anderson, 2004). The era of relationship marketing has changed the conventional view of the customer loyalty. Relationship marketing explained that customer loyalty should be built with great effort in the form of personalization where the customer as the core of marketing activities. Information technology is an answer to all challenges in this era, the use of the internet is a media that has great potential in terms of search the potential market and introduce their product. SMEs should abandon the practice and traditional marketing strategies and switch to relationship marketing to fulfill the market demand. The TERM model was proposed to applied by the SMEs as a smart utilize of relationship marketing effort and information technology capability to boosting the marketing performance.

6.3. Future Research

For similar works in the future it is suggested that the researchers conduct further research by including the indicator variable of SME's for culture and gender. It can also be carried out to investigate the correlation of relationship marketing access versus the use of IT.

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