CAN SME BENEFIT FROM INNOVATION IN AN EMERGING MARKET ECONOMY?

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ABSTRACT

Despite the abundance of literature on SME innovation, this interlinked and complex concept requires further investigation. The present study examines Small and Medium Enterprise (SME) innovation outcomes in order to see whether SME innovation, which is represented by innovation capability and risk taking, has contributed positively (or negatively) to SME which in turn enhance SME financial performance in the context of Indonesia as an emerging market. More often than not, innovation is seen as an effective way to enhance performance especially financial performance as it is highly beneficial for SMEs in an emerging market. However, it is possible that innovations might be regarded as a burden rather than a benefit for SMEs. The present study uses the conceptualization of innovation outcomes as these reflect the organization's ability to benefit from the implementation of innovation. It is important to understand this theme in the context of an emerging market which may offer both golden opportunity to innovate and unprecedented challenges to innovate.

There is little research regarding the impact of SME innovation outcomes on SME performance in an emerging market. The present study used a quantitative approach, a partial least square, WarpPLS 6.0. Data were collected from 120 SME owners in creative industries residing in three Indonesian cities in West Sumatra. It was found that innovation capability had a significant positive relationship with positive outcomes which in turn lead to a better financial performance. This means that innovation outcomes play a greater role in identifying whether innovations benefit SMEs or not. SME innovation in an emerging market economy such as Indonesia may be costly, but it is worth doing as innovation can give monetary benefit as well as better organizational performance.

Keywords: Innovation Outcomes, Emerging Market Economy, Indonesia, SME Innovation, Innovation Capability, Risk Taking.

INTRODUCTION

Small and Medium Enterprises (SMEs) owners may experience a dilemma in implementing innovation. In this regard, rebranding and repositioning strategies are needed, but they are costly and risky activities (Sivadas & Dwyer, 2000). For example, owners may decide to repackage their product as a way to implement rebranding strategy. While this strategy is good on paper, they may be worried about whether this decision will be appreciated by customers. This illustration is a real case of a small Sumatran coffee powder's manufacturer, namely "*Kopi Janggut.*" Established since 1930, the business owner has made no significant changes in their packaging until they decided to do so in the late 2016. This may represent the reluctance to SME innovation implementation in an emerging market even if the SME owners understand the importance of it. They are not convinced that business innovation will benefit their organisation in the near future.

The present study examines SME innovation outcomes in order to see whether SME owners in an emerging market economy are able to fully benefit from innovation. Innovation outcomes are the result of an innovation orientation that could have a positive or negative impact on business organizations. Innovation outcomes also reflect the organization's ability to benefit from the implementation of innovation (Simpson et al., 2006). There is little research done to see the role of innovation outcomes (Laforet, 2013) especially in an emerging market. It is argued that innovation outcomes may play a greater role in an emerging market as the SME owners may be dealing with a greater lack of resources compared to their counterpart in developed countries (Games, 2015) The present study uses Minangkabau ethnic group in West Sumatra, Indonesia, which may offer some additional perspectives into this research. This ethnic group has long been recognised as a source of entrepreneurs in Indonesia. Minangkabau SME owners embrace openness to change values as they have a strong adaptation strategy (Games, 2015). However, these people, as experienced by other small business owners in Indonesia, also have to deal with difficult challenges. Indarti (2010) suggested that SME innovation research in Indonesia and other emerging economies differs significantly from developed economies. She found that Indonesian SMEs typically had no plans to innovate due to a lack of resources and experience in research and development. In contrast to SMEs in developed countries, SMEs in emerging economies such as Indonesia have not typically been designed to pursue radical innovation, while they also typically need to deal with fundamental requirements of small business entities, such as an inability to expand the market, a lack of governance structures and even the absence of a formal legal status (Tambunan, 2009). As a result, SMEs in emerging economies may have more fundamental problems than those in developed countries.
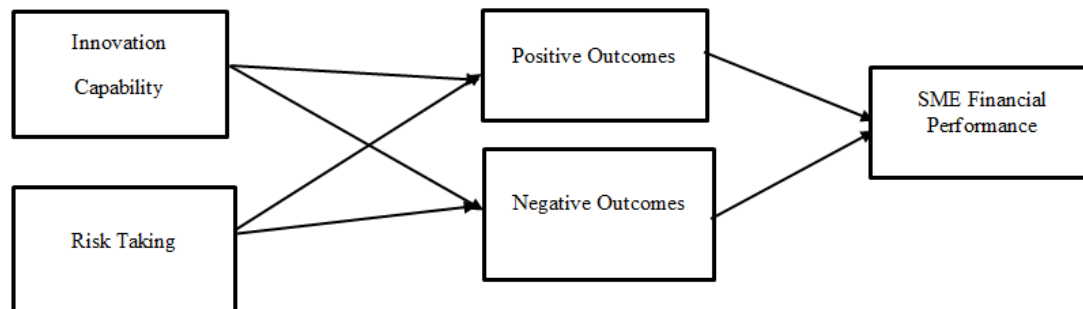
Innovation capability and risk taking are used to signify SME innovation in the present study. These variables are linked to both positive and negative innovation outcomes. After that, both outcomes are linked to SME financial performance. This approach is used in order to capture the reality of whether SME innovation is really worth doing in the context of an emerging economy which has innovation dilemma in their effort to pursue both profitable and sustainable businesses.

LITERATURE REVIEW

Innovation can be very costly for small businesses and there is no guarantee that innovation can be well implemented or whether it will result in a higher performance (Sivadas & Dwyer, 2000). This is the reason why innovation outcomes are important. Innovation outcomes are the result of an innovation orientation that could have a positive or negative impact on business organizations (Simpson et al., 2006). Innovation outcomes also reflect the organization's ability to benefit from the implementation of innovation (Sawang et al., 2007). Thus, innovation outcomes signify successful implementation of innovation (Sawang & Unsworth, 2011). The present study uses the conceptualisation of innovation outcomes used by Simpson et al. (2006). They identify that firm innovativeness may have an effect on innovation outcomes, namely positive outcomes and negative outcomes which in turn lead to firm financial performance. Positive outcomes include type of innovation (quality, number, and speed), market advantage, operational excellence, and market advantage. Further, negative outcomes include increased costs, employee attitude (turnover and job stress), market risks, and innovation beyond core competencies. In this regard, the ultimate task of SMEs will be how to benefit from innovation, while at the same time reduce its negative effects.

Additionally, SME owners may have no clues how to successfully implement business innovation. Rosenbusch et al. (2011) and Tidd et al. (2001) suggested the main reason the factors influencing successful SME innovation have not been fully identified is because there are so many factors that influence success or failure. Indeed, some researchers have argued a combination of external environmental and internal organisational factors play a role in determining SME innovation (Laforet, 2008; Salavou et al., 2004). Essentially, SMEs need to be able to identify their business strategies in order to benefit from innovation.

SME innovativeness can be interpreted as the ability of an organization to open up to new ideas and make it as an organizational culture (Hurley & Hult, 1998). In this regard, as can be seen in the model below, the present study uses innovation capability and risk taking as these two represents openness to changes and willingness to implement innovation. Innovation capability can represent the capabilities of business organizations (Calantone, et al., 2002). Some researchers (Johnson, et al., 1997) argue that innovation capability can be seen as a key factor in dealing with uncertainties. As mentioned previously, risk taking may also play a greater role in SME innovation in an emerging economy. SMEs need to take risks, as this indicates their openness to change, including new ways of working (Laforet & Tann, 2006). However, small business owners may choose to be careful when starting their business or when innovating, as these are costly and risky activities. For example, some Indonesian business owners were reluctant to start a business if it was not seen as a sure thing (Bergley & Tan, 2001). Risk-taking basically reflects the way organisations perceive business opportunities (Moon, 1999). SMEs that were not designed to innovate and are satisfied with current performance are likely to be unwilling to take risks (Storey, 1994). Clearly, SME owners play a central role in calculating the risk associated with opportunities.

FIGURE 1
THE PROPOSED MODEL

Innovation outcomes and SME performance essentially indicate the importance of knowledge and new ways of doing things (Leal-Rodriguez et al., 2015), which can be represented by innovation capability and risk taking. This means that the relevance of these concepts is relevant enough to describe how small businesses will benefit from their business innovation. SMEs in emerging markets may see SME innovation as critical as they are dealing with unprecedented competition and abundant business opportunities. Therefore, it is imperative for SMEs including those from emerging market economies to benefit from innovation even if it is not an easy task.

RESEARCH METHODOLOGY

The quantitative approach was used to answer the following research questions:

1. Are there relationships between innovation capability and risk taking and innovation outcomes (positive and negative outcomes)?
2. Are there relationships between innovation outcomes (positive and negative outcomes) and financial SME performance?

A survey was undertaken with Minangkabau SME owners to examine relationships between innovation capability and risk taking, innovation outcomes, and SME financial performance. Data were collected from 120 Minangkabau SME owners in creative industries residing in three Indonesian cities in West Sumatra. They particularly come from the food industry (72 respondents), handicraft (24), and fashion industry (24) which are in line with the popularity of West Sumatra as a main tourism destination in Indonesia. The criteria used to determine whether respondents' businesses were SMEs were based on the Indonesian Government's criteria in which business are classified based on their assets and annual sales. The present study therefore used a self-administered approach, in which questionnaires were hand-delivered to respondents and picked up after completion. Time and funding constraints prevented the use of a monetary incentive strategy.

A partial least squares, WarpPLS 6.0, approach was used to analyse the data and estimate the suggested structural models. Hair et al. (2012) noted that PLS is being increasingly used in business-related research. It requires smaller samples, makes fewer assumptions about the constructs' distributions but still takes measurement error into account when analysing data (Kock, 2013). In almost all cases, a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to obtain the required responses. The exception was the SME financial performance scale, in which a five-point scale was used, but 1="*much worse*" and 5="*much better*". Calantone et al. (1993) innovation capability measure was used by asking whether the respondent's organisation frequently tried new ideas, used new ways to do things, were creative in methods of operation, often the first to market with new products and services, and new product introduction has increased over the last 5 years. Risk-taking were measured using items adapted from Shoham et al. (2012). Some example items used in this case were "*We believe higher risks are worth taking if there are high payoffs*"; "*We encourage innovative strategies, even knowing some will fail"; and "We like to take big risks*". As mentioned previously, Simpson et al. (2006) innovation outcomes measure was used. Positive innovation outcomes include innovation will result in an increase in product quality, enhance customer satisfaction, and trust among followers, and increase market share and efficiency. Negative outcomes see innovation as costly, easily imitable, and stressful. In terms of SME financial performance, Torugsa et al. (2012) SME financial performance was used by asking the respondents to rate their financial performance items- return on assets and net profits to sales-over preceding six-month period compared to similar SMEs in their industry sector.

RESULTS

Validity and Reliability

Table 1 shows the Means (M), Standard Deviations (SD), Composite Reliability (CR) scores for the constructs included in the present study. The mean scores suggest that respondents have high levels of innovation capability and risk taking, and positive outcomes and SME financial performance, as these means are above the midpoint of five-point scale. Negative outcomes have a slightly above the mid-point, which may indicate that innovation has rather benefitted respondents. Respondents also rate themselves high in terms of financial performance compared to similar SMEs in their industries.

Only two of the 29 items had loadings below 0.60 and each of these was in a different construct, suggesting that their removal would have little impact. Consequently, the two items were removed before examining the constructs in more detail. After their removal, the loadings ranged from 0.98 to 0.87, suggesting that uni-dimensionality could be assumed for each of the constructs. In addition, all of the scales are reliable, as the CR scores are above 0.80. Further, all of the constructs have convergent validity as all items had loadings of >0.05 ($p<005$) (Table 1).

Table 1 MEANS, STANDARD DEVIATIONS, AND COMPOSITE RELIABILITY			
Variable	**M**	**SD**	**CR**
Innovation Capability	3.738	0.573	0.814
Risk taking	3.583	0.548	0.855
Positive outcomes	3.881	0.626	0.928
Negative outcomes	2.610	0.685	0.885
Performance	4.017	0.601	0.908

Table 2 shows correlations and square roots of Average Variances Extracted (AVE). All of the constructs have convergent validity, as the square roots of AVE scores are greater than correlation between any two constructs. As a result, all constructs have robust measurement properties. This may be used with confidence in estimating the model.

Table 2 CORRELATIONS AND SQUARE ROOTS OF AVERAGE VARIANCES EXTRACTED (AVE)					
	IC	**RT**	**PO**	**NO**	**P**
Innovation Capability	**0.726**	0.635	0.539	-0.403	0.277
Risk Taking	0.635	**0.707**	0.529	-0.182	0.263
Positive Outcomes	0.539	0.529	**0.787**	-0.285	0.241
Negative Outcomes	-0.403	-0.182	-0.285	**0.729**	-0.124
Performance	0.277	0.263	0.241	-0.124	**0.912**

Model Fit and Quality Indices

PLS measurement fit indices are based on the R^2 and Q^2 statistics. 35.8 percent of the variation in the positive outcome construct was explained by the innovation capability and risk taking, as the R-squared statistic was 0.358. Further, 21.6% of the variation in the negative outcome construct was explained by the innovation capability and risk taking. In addition, 16.9% of the variation in the financial performance construct was explained by both positive and negative outcomes. Because Q^2 is greater than zero, predictive relevance can be assumed (Fornell & Bookstein, 1982; Sellin, 1995).

Estimating the Model

All of the model's (Table 3) are significant, except for the relationship between risk taking and negative outcomes. For example, the path between innovation capability and positive outcomes is significant ($p<0.05$), with a positive path coefficient ($\beta=0.35$), which indicate that higher level of innovation capability will enhance positive outcomes. The latter indeed lead to a better financial performance as the path between positive outcomes and financial performance is significant with a positive path coefficient ($\beta=0.35$).

The path between innovation capability and negative outcomes is significant, but with a negative path coefficient ($\beta=-0.48$). This means that enhancing innovation capability will reduce negative outcomes. Further, the path between risk taking and positive outcomes is significant, with a positive path coefficient which indicates that risk taking will enhance innovation positive outcomes. Additionally, the path between negative outcomes and financial performance is also significant ($p<0.05$), but with a negative path coefficient (-0.24). This means that negative outcomes should be reduced in order to enhance SME financial performance.

Table 3 THE STRUCTURAL MODEL			
Path	**Coeff.**	**P**	**Conclusion**
Innovation capability ➜ Positive outcomes	0.350	<0.001	Significant
Innovation capability ➜ Negative outcomes	-0.478	<0.001	Significant
Risk taking ➜ Positive outcomes	0.314	<0.001	Significant
Risk taking ➜ Negative outcomes	-0.114	0.100	Not significant
Positive outcomes ➜ Performance	0.260	0.001	Significant
Negative outcomes ➜ Performance	-0.235	0.004	Significant
Model fit and quality indices: Average Path Coefficient (APC)=0.292, p<0.001. Average R-Squared (ARS)=0.247, p=0.001. Average Adjusted R-Squared (AARS)=0.235, p=0.002. Average Block VIF (AVIF)=1.480. Average Full Collinearity VIF (AFVIF)=1.576. Tenenhaus GoF (GoF)=0.386 Sympson's paradox ratio (SPR)=1.000. R-Squared Contribution Ratio (RSCR)=1.000. Statistical Suppression Ratio (SSR)=1.000. Nonlinear Bivariate Causality Direction Ratio (NLBCDR)=0.750.			

DISCUSSION

The present study essentially investigates the role of innovation outcomes in Indonesia's SME. It explores whether SME innovation has benefited Indonesia's SMEs which in turn enhance their profitability. This is important because the context of Indonesia provides both opportunities and challenges as a characteristic of an emerging market economy. The study uses innovation capability and risk taking as a representative of SME innovativeness as these represent a strong will and capability to seek new ways of working (Leal-Rodriguez et al., 2015). First and foremost, it was found that business innovations indeed have helped SMEs even if innovation has been costly and risky. Innovation capability has been found to positively and significantly related to positive outcomes, while it is significantly but negatively related to negative outcomes. This means that enhancing innovation capability will decrease a negative outcome which is good for SMEs. Simultaneously, risk taking will give positive outcomes to these SMEs. Accordingly, SMEs need to take risks, as this indicates their openness to change, including new ways of working (Laforet & Tann, 2006). This is a moment for SMEs in Indonesia to define their businesses. They need to take some risks in order to win the market. These results are in line with Games' (2015) finding on innovation outcomes which found that SME innovativeness and radical approach in innovation will lead to better innovation outcomes in Indonesia's SMEs. Another explanation is that Indonesia's SMEs may have more opportunities to fully express themselves even if it involves a moderate to high risk as the nature of Indonesia's market responds positively to innovation.

In terms of SME financial performance, it was found that positive outcomes have a strong link with SME financial performance, while negative outcomes also have a significant relationship with financial performance with a negative path coefficient. This finding confirms the notion that SME innovation is not only good for organizational performance, but it is also good for financial performance which is highly regarded by SMEs. These findings are in line with conceptualization of innovation outcomes from Simpson et al. (2006) and Laforet (2013). They have identified that innovation activities and strategies included in SMEs may lead to negative and positive outcomes. Similarly, the role of innovation outcomes in the present study have been as the indicator of whether innovation benefited SMEs. This may confirm the role of innovation outcomes as a representative of SME capability to fully benefit from innovation activities and strategies as well as in terms of profitability.

As suggested by Indarti (2010), the context of Indonesia offers a greater difficulty for the implementation of SME innovation. This is a typical in emerging markets. Again, this may even indicate the importance of the SME innovation. The benefit of innovation is greater than the cost for SME innovation in Indonesia. In addition, the respondents of this study are the Minangkabau people in West Sumatra who are working on creative industries in Indonesia, coming from cultures that support entrepreneurship (Elfindri et al., 2010). The findings of the present research offer additional perspectives that there may be a strong relationship between entrepreneurial culture, innovation capability and risk taking behavior which lead to positive innovation outcomes and better financial performance.

In a broader perspective, this finding reflects the importance of strategy in innovating SME businesses in emerging market economies. Business owners had to deal with intense competition and their instinct as they need to do as much as they could to survive. All had taken risks. They have to keep pursuing innovation agenda, while at the same time being aware of its negative consequences. This presents the question as to whether respondents had created a sustainable competitive advantage for their businesses. This resembles the perspective innovation as a strategy by Vanhaverbeke and Peeters (2005).

CONCLUSIONS AND IMPLICATIONS

This study is inspired by two main research in innovation outcomes: Simpson et al. (2006) and Laforet (2013). While these studies used the context of Western societies, they have been very useful particularly in identifying that innovation activities and strategies may benefit or harm SMEs. The present study uses the context of Minangkabau SMEs in Indonesia which is an emerging market. The relationship between innovation capability and positive outcomes is positive and significant as the latter was then positively and significantly related to SME financial performance. This means that innovation outcomes play a greater role in identifying whether innovations benefit SMEs or not, and in examining the impact of innovation in many aspects of organization that lead to better financial performance. In this case, risk taking is essential for business innovation in order to pursue business opportunities. Here risk taking and innovation capabilities can be seen as ways of enhancing SME innovation which in turn will increase SME financial performance.

From the lens of innovation outcomes, it would also suffice to say that it is a moment for Indonesia's SMEs to give their all to fully benefit from innovation activities and strategies. There is a big opportunity to innovate, while the importance of SMEs innovation is undeniable, these SME owners need to be able to seek and fully benefit from ample business opportunities in Indonesia. It is true that the economy is slightly slowing down now in Indonesia, but it still offers a wide range of business opportunities that have previously been neglected. SME owners in Indonesia need to be strategic thinkers who can interpret business strategies and innovation comprehensively. They also need to make decisions quickly about whether they would prioritize some strategies over other important innovation activities. They also need to seek assistance from those who can help them to innovate and formulate business innovation strategies such as university researchers and social entrepreneurs. This can help SMEs to transform their ideas and willingness to change into reality.

LIMITATIONS

There are some issues in this study which can be resolved in the near future. Firstly, this study is a preliminary study for SME innovation outcomes in Indonesia. The present study uses previous conceptualization which is also rarely written in the Western context, which in turn may not compatible with the context of Indonesia as an emerging economy. Secondly, due to a lack of comparison between SMEs from various backgrounds regarding innovation, it would be useful to undertake some research about this issue. Thirdly, the present study emphasized the possible role of innovation outcomes in particular as a representation of new ways of working in Minangkabau SMEs, so that more detailed of explanations in the review of literature are needed. Fourthly, the present study uses 120 respondents, so a larger study with more respondents are needed in the near future.

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