

# **Effect of Core Competence on Sustainable Competitive Advantages of Batik Banyumas Small and Medium Enterprises**

by

**R. Rahab**

*Jenderal Soedirman University, Indonesia*

**Nurul Anwar**

*Jenderal Soedirman University, Indonesia*

**Rawuh Edy Priyono**

*Jenderal Soedirman University, Indonesia*

*This study seeks to determine the relationship between firm core competence, competitive advantage and performance of small and medium enterprises based on analysis of data from a survey conducted on 58 owner and manager of small firms of Banyumas batik in Banyumas Region, Central Java, Indonesia. Data was analysed using multiple regression analysis. The results showed that competence in relationship, adaptation and innovation has significantly effect on firms innovativeness. The ability of entrepreneurs to build business network has eased information exchange leading to social relatedness, and thereby contributing to improve the competitive advantage. The results of the study provide new empirical evidence supporting the resources-based view (RBV) theory.*

## **1. Introduction**

The role of small and medium-sized enterprises (SMEs) in economic development and growth is crucial in both developing and developed countries. SMEs significant contribution to the national gross domestic product (GDP) and employment creation is well known (Tambunan, 2009). In the case of Indonesia, SMEs have contributed 56 percent to the total GDP. This indicates that more than half of the Indonesian's economy has been supported by the SMEs (Kementerian Negara Koperasi and UKM, 2014). The role of SMEs in helping absorb new workforce has been equally remarkable.

Based on the data from Badan Pusat Statistik (Bureau of Statistics), Central Java (2009), textile industry has provided the largest contribution to the economy of Central Java. Batik is one of the work of art and it carries the famous heritage of Indonesia. Indonesian Batik with its most unique silky traditional fabric has been adored in many countries. In addition, batik has also been acknowledged by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) as "Intangible World Heritage." A similar recognition was also given to "keris" (traditional personal sacred weapon) and puppets. In Central Java province, there are many batik industry clusters—Solo, Pekalongan, Banyumas and Sragen. Compared to batik from Solo, Pekalongan and Yogyakarta, Batik Banyumas is relatively unknown but Banyumas Government has been trying hard to promote Batik Banyumas as a part of local cultural product in the international market. The

introduction of imported batik becomes a threat but promotion of export an opportunity for batik industries, especially in Pekalongan in regards to maintaining their competitive advantage and business performance. Indeed, the ability to access government's support, adaptability on business environment and the ability to build business relationship will be the most important factors in maintaining batik's competitive advantage in the market (Meutia, 2012).

Even though SMEs sector has an important role to play in developing economies not only in economic development, but also in poverty alleviation and job creation, it faces a number of constraints, especially in accessing finance, markets, training and technology. The sector faces both problems and opportunities that affect their competitiveness. However, research carried earlier on SMEs reveals that the performance of a number of them is less than satisfactory. Various studies about strategy to develop local economy through industrial core competence have been conducted (Rahab, Najmudin and Istiqomah, 2013). Another Anwar, Rahab and Priyono (2015) has examined problems and challenges associated with creating sustainable competitive advantage in Banyumas Batik Small and Medium Enterprises (BBSMEs). Rahab, Anwar, and Priyono (2015) researched on the significance of value chain upgrading to support competitiveness of Banyumas Batik Industry. Meutia (2013) explored about the role of innovation, creativity, business network and adaptability on competitive advantage. However, there is limited empirical evidence on the effective sources of core competence and performance of Batik Banyumas industry. This study seeks to fill the existing research gap by conducting a study to determine the relationship between core competence, competitive advantage and performance of BBSMEs in Banyumas region.

Regarding critical success factors for SMEs, the literature shows a lack of consistency (O'Regan and Ghobadian, 2004). Some researchers have stated that SMEs success is heavily influenced by the individual itself, that is the entrepreneur. Others have found the importance of external environment such as economic condition and government policy. On the other hand, the availability of financial support and the nature of infrastructure support (Yusuf, 1995) are also found to explain that entrepreneurs as the owner of the business plays an important role in deciding the success of a business (Baum and Locke, 2004; Che Rose et al., 2006; Man and Lau, 2005). External network is one succeeding factor in business because through the business network an industry will be able to share the information, exchange useful information benefitting both sides (Flora and Flora, 1993; Malecki, 1996; Woolcock, 1998). Even though there is a positive evaluation of social capital's role in firm's development, yet some researchers argue that social relationship would not always push the process of innovation development. On the contrary it will lead to community development, higher tolerance and creation of new ideas (Glaeser et al., 1995; Putzle, 1997). An entrepreneur who has high social capital (based on extensive social network, status, personal relatedness, and existing reference) will tend to attract more funds from investors compared with another entrepreneur with lower standing in these dimensions (Shane and Cable, 1998). External network provides a support such as access to the opportunity and resources. As a result, it will influence the micro-business performance (Burt, 1992; Johannisson, 1996).

The ability to build business network will enable the SME owners to have access to business information from the outside. Keats and Hit (1998) stated that

dynamic environment is significantly related to the performance. It influences business environment and a company's performance (Hansen and Wenerfelt, 1989). There have been two factors that work as triggers on the company's performance. The first is the role of external factors in determining the company's success; the second one highlights the internal aspects of MSEs, especially the entrepreneurs. Study which focuses on external factors generally observed the government's role in creating a conducive environment to reach the small business success (Hazlina, 2007). Meutia (2013) found that business network significantly affected competitive advantage.

Innovation capacity is another factor contributing to the SMEs' competitiveness. Wahyono (2002) stated that continuous innovation in an organization was the basic needs to reach the competitive advantage. Conventionally, innovation can be expressed as a breakthrough in adapting the dynamic environment for introduction of new products. Nevertheless, simultaneously with the development of a company, innovation caters new ideas and new process application. Innovation is also viewed as a company's mechanism in adapting with dynamic environment. Any changes in business environment will have forced the companies to create new ideas and to offer innovative products. Innovation has an important part in SMEs improvements because it will not only be the important tool to maintain the company's survival, but it is also necessary in order to win in the hyper competitive environment. Batik is a product of high innovation, which becomes one of the Indonesian cultural assets that need to maintained its existence. Innovation competence, ability to adapt with business environmental change (adaptation competence) and relationship competence will be the important variables in improving competitiveness and the SMEs business performance. These variables have partially been investigated by previous researches on the SMEs, but they have not explored the competitive advantage of batik industry, especially batik banyumas small medium enterprises in Banyumas region. Thus to fill this gap, this study aims to investigate effect of core competence dimensions (innovation competence, adaptation competence and relationship competence) on sustainable competitive advantage.

## **2. Literature Review and Hypothesis Development**

### **2.1 Firm Core Competence**

The definition of core competence varies among researchers. According to Selznick (1957) and Porter (1986), a core competence allows a firm to be different from its competitors in the same field of activity. Hamel and Heene (1994), Dosi and Teece (1998) state that a core competence is defined as the skills and the resources that allow a firm to achieve its goals. According to Hamel and Prahalad (1990), a core competence is the knowledge of the company. The resource-based view (RBV) approach to firm argues that firms possess resources, a subset of which enables them to achieve sustainable competitive advantage, and a further subset which leads to superior long-term performance (Barney, 1991; Grant, 1991). The question of what drives the performance of a firm is a central issue in contemporary research on strategy (Barney, 2001; Farjoun, 1998). Strategic competence is a central driver of firm performance (Pehrsson, 2001). The concept is primarily an outgrowth of the resource-based view of strategy (Barney, 1991, 2001; Grant, 1991). In this view,

resources essentially are said to confer competitive advantage to the extent that the resources must be difficult to create, buy, substitute, or imitate (Barney, 1991; Lippman and Rumelt, 1982). In line with this, strategic competence is considered to be a crucial source of heterogeneity that enables the firm to achieve competitive advantage and generate high performance. Sustainable competitive advantage is the unique position that an organization develops in relation to competitors that allows it to outperform them consistently (Hofer & Schendel, 1978).

The resource-based theory is considered as a useful framework to research and understand the dynamics of firms in their attempts to attain sustainable competitive advantage. Resource-based theories hold that enterprises with valuable, rare and inimitable resources have the potential of achieving superior outcomes, and thereby achieving sustainable competitive advantage (Wiklund and Shepherd 2003). Birney (1991) describes resources as inputs in a firm's production process. Resources are usually categorized as either property-based or knowledge-based (Wiklund and Shepherd 2003). Property-based resources refer typically to tangible input resources while knowledge-based resources are the ways in which firms combine and transform tangible input resources. Knowledge-based resources are important in providing sustainable competitive advantage. Resource-based theories have largely focused on categorizing resources and examining the relationships between resource configurations and firm performance in its ultimate goal of attaining competitive advantage. Little attention has been devoted to examining the relationships between different resource configurations.

## **2.2 Sustainable Competitive Advantage**

The idea of a Sustainable Competitive Advantage (SCA) surfaced in 1984 (Day, 2004). The actual term SCA emerged in 1985, when Porter discussed the basic types of competitive strategies that a firm can possess (low-cost or differentiation) in order to achieve a long-run SCA. Interestingly, no formal conceptual definition was presented by Porter in his discussion. Day and Wensley (1988) admit that there exists "no common meaning for "SCA" in practice or in the marketing strategy literature. Barney (1991) has probably come the closest to a formal definition by offering the following, "A firm is said to have a sustained 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." Although lacking a formal definition, Coyne (1986) contributed to the construct by proposing that in order to possess an SCA, consumers must perceive some difference between a firm's product offering and the competitors offering.

In achieving sustainable competitive advantage in organizations, Barney (1991) argues that valuable, rare, and unimitable resources are necessary but not sufficient to facilitate better outcomes. Firms must also have an appropriate organizational culture in place to take advantage of these resources. An entrepreneurial orientation fits in this context as it offers an important measure of the way firms are organized (Wiklund and Shepherd, 2003). Entrepreneurial orientation refers to a firm's strategic orientation, capturing specific entrepreneurial aspects of decision-making styles, methods and practices (Lumpkin and Dess, 1996). Previous studies (such as Kimuyu and Omiti, 2000; Zeller 1994) have largely focused on the direct link between individual strands or configurations of personal resources and access to bank credit

while less attention has been devoted to how small enterprises can utilize these resources more effectively in their pursuit of sustainable competitive advantage.

### **2.3 Performance of Small and Medium Enterprise**

SMEs growth is often closely associated with firms' overall success and survival. Growth has been used as a simple measure of success in business. Growth is the most appropriate indicator of the performance for surviving SMEs. Moreover, growth is an important precondition for the achievement of other financial goals of business. From the point of view of an SME, growth is usually a critical precondition for its longevity. Young firms that grow have twice the probability of survival as compared to young non-growing firms. It has been found that strong growth may reduce the firm's profitability temporarily, but increase it in the long run (Parker, 1989). But there are several conceptual and empirical challenges in the study of firm growth. Firm growth in general refers to increase in size. However, firm growth has been operationalized in many ways and different measures have been used. This may be one reason for the contradictory results reported by previous studies, though other explanations have also been rendered.

However, it has been found that these measures, which are frequently used in the SMEs context, are strongly intercorrelated. Such an intercorrelation may not exist among capital-intensive large companies. Most studies of firm growth have focused on large companies or new venture, while the growth of established, long-lived SMEs seems to have attracted much less attention. In fact, many organizational life cycle models present growth as one stage of development in the organizational life cycle. On the other hand, it has been shown that most new jobs are created by existing, not new, SMEs.

### **2.4 Relationship between Core competence On Competitiveness**

Network theory shows that the ability of SME owners to get access into rare sources could economically be secured through a competence to build relationship with others, and this in turn will contribute to the business success (Zhao and Aram, 1995). Florin (2003) stated that relationship with others provides added value to their member by letting them gain access to social resources which are implanted in a relationship, and where the relationship itself provides a means to the SMEs owner to get external resources needed by the organization (Jarillo, 1989). Granovetter (1983) stated that an individual who has business relationship with relatives and colleague will likely gain an access to larger information compared to an individual who does not have such a network. Based on this reasoning, Fischer and Reuber (2003) stated that a company owner needs to develop and improve its relationship with external environment to enhance the business growth. Network can improve social capital of SMEs owners (Coleman, 1988) since an access to the information is implanted in retrieved network. Fischer and Reuber (2003) stated that the owner of an organization needs to improve the relationship with external environment to enhance the business growth. Based on these empirical evidences, one can generate the following hypothesis.

*Hypothesis 1. Relationship competence have a positive impact on firm's competitiveness.*

Environment is the entire condition of external environment, which influences an organization. Environment consists of internal and external environment. Internal environment is closely related to the entire condition of an organization such as resources, capability, and core competence, which are owned by an organization (Hitt et al., 2001). Meanwhile, the external environment includes the general environment, type of industry and competitors. The lack of market power and a dynamic environment surrounding the company makes an SME susceptible to any external influence compared to the toughness of a bigger company (Man and Lau, 2002). Baringer (1997) found that an organisation, which has a rapid growth enable to operate in a friendlier environment, compared to the organisation that has a slower pace. This clearly indicates that there could be a positive influence of the environment on the business competitive advantage.

According to Amit and Schoemaker (1993), organization has to be able to adapt itself in a fast changing environment and with new technology to achieve its competitiveness. The previous studies (Beal, 2000; Sinkovics et al., 2004; Barokah, 2009) stated that adaptation competence affects the competitiveness. The competence of entrepreneurs in adapting themselves to business environment becomes an internal source, which is hard to be imitated by other companies, and this in turn will create competitiveness for the organization itself. Based on the above explanation and previous empirical findings, the second hypothesis can be generated as:

*Hypothesis 2: Adaptation competence have a positive impact on firm's competitiveness.*

Faced with an environment that is characterized by a rapid changes in customers preference, technology, and competition, a company must create competitive advantage to survive. The ability of an organization to innovate, its organisational learning, market orientation and entrepreneurship have been considered as the main capabilities of a company to reach its competitive advantage (Hult and Ketchen, 2001; Hurley and Hult, 1998; Ireland et al., 2001). These capabilities also help the company to create its competitive advantage and continue on its trend in the market. Competitive advantage is closely related to the developing generation of innovative product; it in turn provides an advantage for the companies to win the competition. According to Chiarvesio (2004), a leading company is characterized by dynamic strategic behaviour in its ability to innovate, have a proper relationship management with market, suppliers, internationalize the process, and organize and manage the business network by creating a new value for the customer (Mizik and Jacobson, 2003). Based on this explanation and previous empirical findings, the following hypothesis can be constructed:

*Hypothese 3: Innovation competence have a positive impact on firm's competitiveness*

## **2.5 Relationship between Competitiveness and Business Performance**

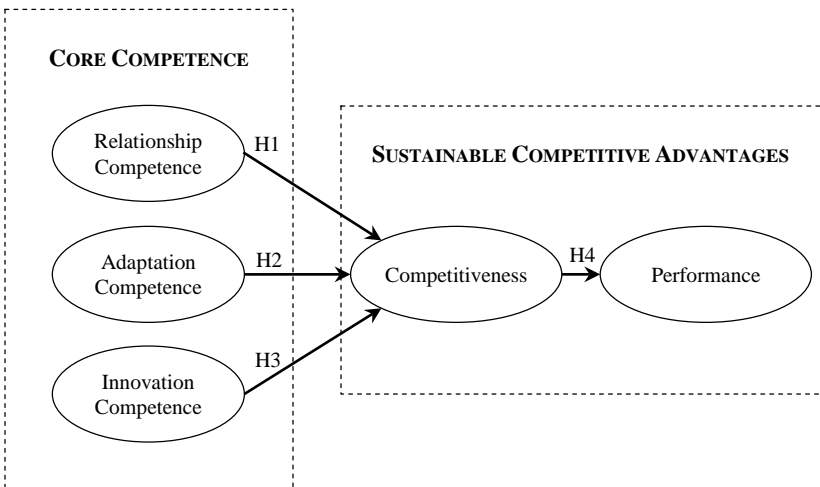
The result from Diosdad (2003) study has shown that competitiveness can be viewed from company's position compared to their competitors' weaknesses and strengths. Competitiveness was derived from the ability of a company to keep their resource superiority and its capability. Competitiveness indicates the company's skill and resource superiority viewed by the customers or based on the lower cost

attainment, market share and portability performance. Competitiveness can also be viewed from the amount and source of capital accumulated by the company.

According to Barney (1991), a company can be identified when it applies to value creation strategy not followed by their competitors (Sinkovics et al., 2004). And as Jennings and Lumpkin (1992) have stated, there is a lack of research focusing on the SMEs on this front. Strategic approach has potential to improve competitive ability and make a contribution to the company's performance improvement (Sinkovics et al., 2004). Respatya (2001) stated that a company that produces goods and services has basically started paying attention to its competitive advantage in terms of its survival and profitability. Competitive advantage pushes the SME's business performance through profit generation, sales development, and increasing the number of customers. Lisman et al., (2004) and Ariya (2003) have stated that competitive advantage has positively influenced the organizational performance. In batik industry context, Meutia (2013) found that competitiveness affects on firm performance. Based on these explanation and previous empirical findings, the following hypothesis can be proposed:

*Hypothesis 4 : Competitiveness have a positive impact on firm's performance.*

Based on the proposed hypotheses, a theoretical framework could be developed as shown in Figure 1. Dimension of core competence (relationship competence, adaptation competence and innovation competence) will have effects on competitiveness of firm and competitiveness directly will have an effect on firm performance. We assume that competitiveness and performance are a part of sustainable competitive advantage.



**Figure 1.**

### **3. Research Method**

This study uses quantitative approach. Population of this study is the owner and manager of batik banyumas small and medium enterprises (BBSMEs) of batik banyumas in 5 (five) regency. Data collection was done through direct survey in June and July 2015, using purposive sampling technique. The BBSMEs were selected based on the purposive sampling technique with the following criteria: (1) it has been in business for at least 3 years. This is to evaluate trend and the dynamic of batik market, (2) it has permanent workers which means that the company is relatively stable and able to continuously produce, (3) it involves not only distribution activities, but also production activities, and (4) it covers marketing nationwide.

A total of 67 BBSMEs were included in the study. In total, 67 questionnaires were distributed to the managers or owners. The number of usable returned questionnaires was 58, giving a response rate of 86 percent, a rate that is regarded as good. The survey was administered directly. The questionnaire was in Bhasa Indonesia, which is the communication language in Indonesia. A majority of the respondents (83 percent) were male. Fifty five percent of the respondents were 40–60 years old and the majority of the respondents (63 percent) with job experience between 4–8 years.

#### **3.1 Measurement and Data Analysis**

To test the hypotheses, we used regression analysis using SPSS software 20. Two steps in detailed statistical analysis of data were involved. At the first stage, descriptive statistical analysis was performed to extract the mean and standard deviation of underlying study variables: core competence, competitive advantage, organizational performance and their dimensions. In the second stage, multiple regression analysis was performed to understand the relationship among these variables. To measure the variables investigated in the study, few indicators are used based on previous researches and theories. As for the variable relationship competence, three indicators were used, namely: (i) the amount of network with production sector; (ii) the amount of network with the supplier; (iii) the amount of network with distribution channel. The second variable of the study is the adaptation competence on business environment. It is defined as the ability to adapt with dynamic uncertain environment such as the adaptability with the changes in customer's preference, market changes, competition, and the government's policy alteration and technology speed (Covin and Slevin, 1989; Stamp, 2008; Hazlina, 2010; McGinnis, 1993). Innovation competence are measured by three indicators: (i) design innovation (ii) motif design innovation (iii) technology innovation. Meanwhile, competitiveness is the government's ability to provide an added value to win the competition. It is the result of product differentiation between competitors and it is more than product of differentiation (Coyne, 1997). Competitiveness indicators include: (i) the creation of better customer loyalty compared to the competitors, (ii) the creation of better product development compared to the competitors, (iii) the creation of better technological development compared to the competitors, (iii) and the creation of more variety of products compared to the competitor. Finally, the business performance was measured by four indicators, namely: (i) sales development, (ii) working capital growth, (iii) customer growth, and (iv) profitability (Wiklund, 1999; Wiklund and Shepherd, 2005; Stamp, 2008).



#### 4. Analysis and Results

Table 1 presents summary statistics of the metric variables in the study. A check of correlations among the metric dependent variables found few significant correlations, and none that reached as high as 0.5, indicating that there were no problems with multicollinearity between variables.

**Table 1. Mean of metric variable**

| <b>Variable</b>         | <b>Mean</b> | <b>SD</b> |
|-------------------------|-------------|-----------|
| Relationship Competence |             |           |
| REL1                    | 1.83        | 0.22      |
| REL2                    | 1.95        | 0.22      |
| REL3                    | 1.96        | 0.21      |
| Adaptation competence   |             |           |
| ADAP1                   | 1.69        | 0.22      |
| ADAP2                   | 1.92        | 0.22      |
| ADAP3                   | 1.87        | 0.21      |
| ADAP4                   | 1.87        | 0.22      |
| ADAP5                   | 1.90        | 0.22      |
| Innovation competence   |             |           |
| INNOV1                  | 1.96        | 0.21      |
| INNOV2                  | 1.93        | 0.22      |
| INNOV3                  | 1.88        | 0.21      |
| Competitiveness         |             |           |
| COMP1                   | 1.82        | 0.22      |
| COMP2                   | 1.90        | 0.20      |
| COMP3                   | 1.68        | 0.24      |
| COMP4                   | 1.86        | 0.21      |
| Performance             |             |           |
| PERF1                   | 2.77        | 0.15      |
| PERF2                   | 2.84        | 0.13      |
| PERF3                   | 2.60        | 0.18      |
| PERF4                   | 2.91        | 0.17      |

Internal reliability for the adapted scale was compared to that reported in the developmental literature. Scales as presented in Table 2 showed a good internal consistency. As can be seen, Cronbach alpha reliability coefficients are at acceptable levels and fall between 0.813 for performance scale and 0.851 for relationship competence. The overall questionnaire presented a Cronbach alpha of 0.97. Nunnally (1978) indicated 0.7 to be an acceptable reliability coefficient.

**Table 2. Reliability analysis of core competence, competitive advantage and organizational performance**

| Variable                | Number of items | Cronbach alpha |
|-------------------------|-----------------|----------------|
| Relationship Competence | 3               | 0,851          |
| Adaptation competence   | 5               | 0,819          |
| Innovation competence   | 4               | 0,838          |
| Competitiveness         | 4               | 0,819          |
| Performance             | 4               | 0,813          |

Table 3 shows effect of Core Competence dimensions (Relationship Competence, Adaptation competence and Innovation competence) on competitiveness of Banyumas Batik Industry.

**Table 3. Summary of regression results**

| Model      | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
|            | B                           | Std. Error | Beta                      |       |      |
| (Constant) | .864                        | .276       |                           | 3.133 | .002 |
| REL        | .234                        | .075       | .223                      | 3.100 | .002 |
| ADAP       | .220                        | .068       | .231                      | 3.219 | .002 |
| INNOV      | .299                        | .067       | .309                      | 4.444 | .000 |

\* Dependent variable: Competitiveness, the impact is significant at level ( $\alpha = 0.05$ )

Summary of regression results that explain effect of competitiveness on business performance of BBSMEs are presented in Table 4.

**Table 4. Summary of regression results**

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
|              | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant) | 1.871                       | .263       |                           | 7.121 | .000 |
| Comp         | .478                        | .066       | .472                      | 7.247 | .000 |

\* Dependent variable: Business performance, the impact is significant at level ( $\alpha = 0.05$ ).

## 5. Discussion

This study found that relationship competence significantly affects competitiveness (sig: 0,002, t value: 3,100). This finding indicates that the entrepreneur who is responsive with the changes in an environment will be a positive factor for the company. Empirical results showed that those respondents were aggressive in dealing with any changes that happened in a business environment because they viewed it as an ordinary phenomenon. Most respondents were able to predict the changes that take place in a business environment.

Therefore, they adapted to deal with the changing trends, as they have already known how to deal with it.

In addition, the study found that adaptation competence has a significant effect on competitiveness (sig: 0,002, t value: 3,219). BBSMES continuously adapted themselves with the changing customer's preference. If the designs of fashion become outdated, most of the products will be unsold; their warehouse will be full by unsold goods; and it will be disadvantageous for the company. In order to avoid the unsold product, the Batik companies need to create a new design and material that are always searched by the customers, as Batik Banyumas has been known as the leader in the industry. Accordingly, the ability to continuously adapt with business environment will cause demand for additional investment for keeping up with the technological and market changes.

Furthermore, the study also shows that innovation competence significantly affects competitiveness (sig: 0,000, t value: 4.444). Innovation competence will continuously burden the small firm to keep the change of new technology, including new design, batik motif and material. Creativity is needed in Batik industry and will become a significant factor to attain the competitive advantage. Innovation competence, particularly in computer usage is aimed to create new design and new motives. Based on the data, the entrepreneurs or creativity teams often observed the worldwide trend to create the new design that will be launched into the market. They usually exchange their information with national designers. Handwritten Batik usually has unique design and traditional characteristic and it is mainly intended to serve exporting needs. Becoming creative in responding the changes in product development and customer's preference will improve the competitive advantage, especially when the respondents are able to improve a better quality of product.

Finally, the study shows that the competitive advantage significantly influences the business performance (sig: .000, t value: 7.247). This finding indicates that the greater the competitive advantage the better will be the SMEs business performance. This finding is supported by the studies of Lisman et al. (2004), Ariya (2003) and Meutia (2014) which explain that competitive advantage positively influenced the firm performance. One major factor in competitive advantage is that SMEs maintain a high rate of creativity in design such that it is hard for competitors to imitate. High creativity in Batik processing could easily make the Batik entrepreneur in Pekalongan to be the leader both in the national and international Batik markets. The result of this study is also in line with the Resources Based View (RBV) theory, which states that an organization would maximally empower their capabilities to improve their relationship in increasing business network. The result from this study also explains that competitive advantage will be reached if innovation creativity is continuously employed since innovation is one of the major capabilities in an organization.

## **6. Conclusion**

We have provided empirical evidence of the relationship between core competence, competitive advantage and organizational performance in this study. We consider core competence to be a vital determinant of competitive advantage and organizational performance as the study produced evidence of the effects of core

competence on competitiveness of batik banyumas industry. The study has also confirmed that all three dimensions of core competence (relationship competence, adaptation competence and innovation competence) are significant in explaining firm's competitiveness. Thus BBSMEs owners can use the current findings to develop strategies that deepen competitive advantage and enhance organizational performance. To remain competitive and obtain sustainable competitive advantages, owners of BBSMEs can try to increase organizational performance by managing each dimension of core competence i.e. relationship competence, adaptation competence and innovation competence.

The practical implication of the study is that the BBSMEs could improve their sustainable competitive advantages by enhancing its competitiveness and its performance following the resources based view of the firm. However, this study only investigated variables from internal side of a company, while none of the external variables such as business environment and government's support was investigated. Another limitation of this study is that we only used limited BBSMEs data collected in Barlinmascakeb area. Hence the findings of this study cannot be generalized for batik industry in another place and country.

## **Acknowledgement**

The authors gratefully acknowledge financial support from Higher Educational Directorate, Ministry of National Education, Republic of Indonesia under the 2015 National Strategic Research Grant Program. We also thank to anonymous reviewers and review editor for valuable suggestions.

## **References**

- Amit, R. and Schoemaker. 1993. Strategic asset and organizational rent. *Strategic Management Journal*, 14: 33–46.
- Anwar, Nurul; Rahab and Rawuh Edy Priyono. 2015. Core competence of Batik Banyumas industry: Problems and challenge to create sustainable competitive advantage. *International Journal of Applied Business and Economic Research*, 13(1):
- Ariya, W.N. 2003. Sources of competitive advantage and firm performance: The case of Sri Lankan value-added tea producers. *Asia Pacific Journal of Management*, 20: 73–90.
- Barney.J.B. 1991. Firm resource and sustained competitive advantage. *Journal of management*, 17(1): 99–120.
- Barney, J. 1995. Looking inside for competitive advantage. *Academy of Management Executive*, 9(4): 49–61.
- Barney, J. 2001. Is the resource-based view a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1): 41–56.
- Barokah, S.N. 2009. Studi tentang Faktor-Faktor yang Mempengaruhi Kualitas Strategi Bersaing untuk Meningkatkan Kinerja Perusahaan pada KUKM

- Pengrajin Kulit di Manding-Bantul. *Program Studi Magister Manajemen Program Pasca Sarjana Universitas Diponegoro Semarang.*
- Barringer, B.R. and Jeffrey S. H. 2000. Walking a tightrope: Creating value through inter-organizational relationships. *Journal of Management*, 26(3): 367–403.
- Baum, J.R. and Locke, E.A. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4): 587–598.
- Beal, M.R. 2000. Competing effectively: Environmental scanning, competitive strategy, and organizational performance in small manufacturing firms. *Journal of Small Business Management, Milwaukee*. 38(1): 27–47.
- Burt, R. S. 1992. *Structural Holes*. Cambridge: Harvard University Press.
- Chiarvesio, M. 2004. From local networks of SMEs to virtual districts? Evidence from recent trends in Italy. *Research Policy*. 33(10): 1509–28.
- Coleman, J. S. 1988. Social capital in the creation of human capital. *American Journal of Sociology*, 94: 95–120.
- Covin J.G and Slevin. 1989. Strategic management of small firm in hostile and benign environment. *Strategic Management Journal*, 10(1): 75–87.
- Coyne, K. P. 1997. Sustainable competitive advantage – What it is, What it isn't. *Journal of Strategy*, 25(4).
- Diosdad, A. 2003. Pengaruh Budaya Perusahaan Terhadap Keunggulan Bersaing. *Jurnal Sains Pemasaran Indonesia*, 2(3): 256–278.
- Day, GS, and Wensley, R. 2008. Assessing advantage: A Framework for diagnosing competitive superiority. *Journal of Marketing*, 12(1).
- Fischer, E., and Reuber, R.A. 2003. Support for rapid-growth firms: a comparison of the views of founders, government policymakers, and private sector resource providers. *Journal of Small Business Management*, 41(4): 346–365.
- Flora, C. B. and Flora, J. L. 1993. Entrepreneurial social infrastructure: a necessary ingredient. *Annals of the Academy of Political and Social Science*, 529: 48–58.
- Florin, J., Lubatkin, M. and Schulze, W. 2003. A social capital model of high-growth ventures. *Academy of Management Journal*, 46: 374–396.
- Ghozali, I. 2011. Aplikasi Analisis Multivariate Dengan Program SPSS. *Semarang: BP Universitas Diponegoro.*
- Glaeser, E. L., Sacerdote, S. B., and Scheinkman, J. A. 1995. Crime and social interactions. *Quarterly Journal of Economics*, 111: 507–548.
- Granovetter, M.,S. 1983. Economic action and social structure : The problem in embeddedness. *American Journal of Sociology*, 91: 481–510.
- Grant, R.M. 1991. The resource based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33 (3): 114–135.
- Hamel, G and Prahalad, C.K. 1990. The core competence of the corporation. *Harvard Business Review*, 68(3): 79–92.

- Hamel, G., and Prahalad, C. 1994. The concept of core competence, in Hamel, G. and Heene, A. (Eds.), *Competence-Based Competition*, Wiley, New York, NY: 11–33.
- Hair, J. F. 2010. *Multivariate Data Analysis*. Seventh Edition. London: Prentice-Hall International (UK) Limited.
- Hamel, G and Prahalad, C.K. 1990. The core competence of the corporation. *Harvard Business Review*, Vol. 68 No. 3: 79–92.
- Hansen. S. and Wernerfelt. B. 1989. Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*,10(5): 399–411.
- Hazlina. 2007. A Cross cultural study of entrepreneurial competencies and entrepreneurial success in SMES in Australia and Malaysia. *Ph.D. Thesis submitted to the University of Adelaide*.
- Hitt, M.A., Ireland, R. D., Camp, S. M., and Sexton, D. L. 2001. Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic Management Journal*, 22: 479–491.
- Hofer, C.W. and Schendel, D. 1978. *Strategy Formulation: Analytical Concepts*. West Publishing, St. Paul, MN.
- Hult, G.T.M, and Ketchen D.J. 2001. Does market orientation matter? A test of the relationship between positional advantage and performance. *Strategic Management Journal*, 22(9): 899–906.
- Hurley, R.F, and G.T.M. Hult. 1998. Innovation, market orientation an organizational learning: An integration and empirical examination. *Journal of Marketing*, 62: 42–54.
- Ireland, R.D., Hitt, M.A., Camp, S.M. and Sexton, D.L. 2001. Integrating entrepreneurship and strategic management actions to create firm wealth. *Academy of Management Executive*, 15(1).
- Jarillo, C.J. 1988. On strategic networks. *Strategic Manag Journal*, 9: 31–41.
- Jennings, D.E, and Lumpkin. 1992. Insights between environmental scanning activities and Porter's generic strategies: An empirical analysis. *Journal of Management*, 18: 791–803.
- Johannisson, B. 1996. The dynamics of entrepreneurial networks. In: Reynolds, P., et al. (Eds.). *Frontiers of Entrepreneurship Research*, 253–267.
- Keats, B.W., and Hitt, M.A. 1988. A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *The Academy of Management Journal*, 31: 570–598.
- Lisman, Chan, Shaffer, Margaret A. and Snape, ED. 2004. In search of sustained competitive advantage: The impact of organizational culture, competitive strategy and human resource management practices on firm performance. *International Journal of Human Resource Management*, 15(1): 15–3.
- Malecki, E. J., and Tootle, D. M. 1996. The role of networks in small firm competitiveness. *International Journal of Technology Management*, 11(2): 43–57.

- Man, T., and Lau, T. 2002. The competitiveness of small and medium enterprises. A conceptualisation with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2): 123–142.
- Man, T., and Lau T. 2005. The Context of entrepreneurship in Hong Kong. *Journal of Small Business and Enterprise Development*, 12(4): 464–481.
- McGinnis. 1993. Logistic Strategy Organizational Environmental and Time Competitiveness. *Journal of Business Logistic*, 14: 1–23.
- Meutia. 2012. Pengembangan Kompetensi Sosial Kewirausahaan Untuk Meningkatkan Keunggulan Bersaing dan Kinerja Bisnis UKM. UKM Batik di Kota Pekalongan. *PhD Thesis*. Undip. Semarang.
- Meutia. 2013. Improving competitive advantage and business performance through the development of business network, adaptability of business environment and innovation creativity: An empirical study of Batik Small and Medium Enterprises (SME) in Pekalongan, Central Java, Indonesia”. *Aceh International Journal of Social Sciences*, 2 (1): 11–20.
- Mizik, N., and Jacobson, R. 2003. Trading off between value creation and value appropriation: the financial implications of shifts in strategic emphasis. *Journal of Marketing*, 67: 63–76.
- O’ Regan, N., and Ghobadian, A. 2004. The importance of capabilities for strategic direction and performance. *Management decision*, 42(2): 292–312.
- Putzel, J. 1997. Accounting for the ‘dark side’ of social capital: reading Robert Putnam on democracy. *Journal of International Development*, 9(7): 939–949.
- Rahab; Nurul Anwar, Rawuh, Edy Priyono. 2015. Value chain upgrading to support competitiveness of Batik Banyumas Industries. *Proceedings of the Australasian Conference on Business and Social Sciences 2015*, ISBN: 978-0-9925622-1-2
- Rahab, Najmudin and Istiqomah. 2013. Local economic development strategy based on local industrial core competence. *International Journal of Business and Management*, 8(1).
- Respatya. D.M. 2001. Analisa pengaruh strategi pelayanan prima dan fasilitas terhadap kepuasan nasabah pada PT. Bank Negara Indonesia (Persek Kantor Cabang Semarang). *Thesis, Magister Manajemen Universitas Diponegoro*.
- Sinkovics, Rudolf, R, Roath and Anthony, S. 2004. Strategic orientation, capabilities, and performance in manufacturer- 3 PL relationships. *Journal of Business Logistics*, 25(2): 43–64.
- Stamp. 2008. Entrepreneurial orientation and new venture performance: The moderating Role of Intra- and Extra industry social capital. *Academy of management journal*, 51(1): 97–111.
- Wahyono. 2002. Orientasi Pasar dan Inovasi: Pengaruhnya Terhadap Kinerja Pemasaran. *Jurnal Sains Pemasaran Indonesia*, 1(1).
- Wiklund, J. 1999. The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship: Theory and Practice*, 24(1): 37–49.

- Wiklund, J., and Shepherd, D.A. 2005. Entrepreneurial orientation and small business performance; a Configurational Approach. *Journal of Business Venturing*, 20: 71–91.
- Woolcock, M. 1998. Social Capital and economic development; Toward a theoretical synthesis and policy framework. *Theory and Society*, In Elinor O and T.K. Ahn (Eds) *Foundation of Social capital*. Massachusetts: Edward Elgar Publishing Limited.
- Yusuf, A. 1995. Critical success factor for small business perceptions of south Pacific entrepreneur. *Journal of small business management*, 33(2): 68–73.
- Zhao, L., and Aram, J. D. 1995. Networking and growth of young technology-intensive ventures in China. *Journal of Business Venturing*, 10(5): 349–370.