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Innovation capability of SMEs through entrepreneurship, marketing capability, relational capital and empowerment

Heru Sulistyo*, Siyamtinah

Faculty of Economics, Sultan Agung Islamic University, Jl. Raya Kaligawe KM. 4, Semarang, Central Java, 50112, Indonesia

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ABSTRACT

This study aims to examine the influence of entrepreneurship, marketing capabilities, relational capital and empowerment toward the innovation capability and performance. The problem of the study is how to improve innovation capabilities and performance of SMEs woven in Troso Jepara. The sample in this study is SMEs woven owners in Troso Jepara consisting of 120 people by using a purposive sampling method. The data is collected by survey method through interviews and questionnaires. The results of the data analysis using PLS demonstrate that there is a significant and positive influence of entrepreneurship, marketing capabilities, relational capital and empowerment toward innovation capability and performance. Performance significantly and positively influences the competitive advantage. Based on the findings of this study, innovation capabilities and performance can be enhanced through the development of entrepreneurship, marketing capabilities, relational capital and empowerment.

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1. Introduction

Fashion industry is one of the creative industry sectors in Indonesia which gives high contribution to the gross domestic product (GDP). Creative economic sectors contribute 7% to the gross domestic product (GDP) of Indonesia or reach Rp 650 trillion. These industries absorb employment for 12 million people who work at 5 million companies. The contribution of fashion industry in 2014 reached Rp 181 trillion, or about 2% of the GDP of Indonesia with an average growth of 6.4% per year. The employment of the fashion creative industry sector is 4.13 million people or 4.22% of the level of participation of national employment.

One of the fashion industries favored by consumers and fashion designers are woven batik industry. Woven batik is mostly produced in Troso village, district of Jepara Indonesia. The development of batik woven industry reaches 238 business units and absorbs employment for 4210 people in 2014. Although batik sector competitive advantage that exists today is not optimal, but the potential for growth is huge. There are many factors affecting the low competitive advantages, such as innovation, entrepreneurial

ability and relational capital. The competitive advantage of fashion's creative industries, especially small and medium enterprises, can be improved through enhancing innovation capabilities both in terms of marketing and process. Innovation capability is the ability to develop new products according to market demand (Adler & Shenbar, 1990). The study conducted by Tsai and Tsai (2010) concludes that the management and technological Innovation capability significantly and positively affect performance on the financial aspect, internal business processes, learning and growth. The study conducted by Baldwin (1995) in Canada concludes that more intense innovation activities occur on small and medium enterprises. The small-scale firms have a competitive advantage associated with slender organization structure, closeness to customers and proximity to suppliers, rapid in decision-making, a simple administrative structure, and flexibility in operation. Some factors that influence innovation capabilities in the fashion creative industry are: the relational capital (Capello & Faggian, 2005; Mucelli & Marinoni, 2011), knowledge sharing (Rahab, 2011); The study conducted by Battor and Battor (2010) finds that there is a positive correlation between customer relationship management capability and the performance mediated by innovation capabilities. Moreover, Lee and Hsieh (2010) conclude that entrepreneurship positively affects Innovation capability. Management practices that empower employees through delegation in decision-making process will encourage the increased of innovation capabilities.

* Corresponding author.

E-mail addresses: heru@unissula.ac.id (H. Sulistyo), siyamtinah66_fe@yahoo.com (Siyamtinah).

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The result of the study by Cakar and Erturk, (2010) shows that empowerment as antecedent of innovation capabilities has a positive and significant effect. Relational capital is also important factor which gives contribution to encourage innovation in the organization. The study conducted by Ghorbani (2012) shows that there is a significant correlation between relational capital and organizational innovation. The high innovation capabilities in the organization will improve performance (Tsai & Tsai, 2010) and the competitive advantage of the fashion creative industries (Lee & Hsieh, 2010). The importance of testing factors that influence innovation capabilities are the focus of this study. Therefore, the research problem in this study is how to improve innovation capabilities to enhance performance and competitive advantage of the organization on the woven batik fashion creative industry. The aim of this study is to examine the effect of relational capital, entrepreneurship, marketing capability and empowerment towards innovation capabilities to improve performance and competitive advantage.

2. Theoretical background

2.1. Innovation capability

Innovation is an important organizational capability, because the success of new products is the engine of growth which give impact on increasing sales, profits, and power of competition for many organizations (Battor & Battor, 2010; Sivadas & Dwyer, 2000). Some study findings agree that there is a direct and positive correlation of innovation and superior performance (Calantone, Cavusgil, & Zhao, 2002; Hult, Hurley, & Knight, 2004; Keskin, 2006; Panayides, 2006; Thornhill, 2006). However, the failures of new products in some areas are between 40% and 75% and 50% of them introduced each year failure. Hult et al. (2004) describe that innovation is as a process, product and organization of new ideas. Innovation is defined as a process that begins with an idea, the results development findings and introduction of new products, processes and new services in the market (Thornhill, 2006). The influence of innovation on performance has been tested intensively by some current study and the findings provide a significant effect Romijn and Albaladejo (2000) in their empirical study on 50 small and medium enterprises in the United Kingdom (firms with less than 250 employees), explain that internal factors, such as level of education and owner experience of the company, study and development institutions, technical skills of manpower and investment in training and human resource development is the determinants of organizational innovation. Meanwhile, the external factors such as financial support from the government for study and development, communication or interaction with external parties (customers, suppliers, competitors, financial institutions, R & D Institutions, Industry associations) also become significant determinants of organizational innovation capability.

2.2. Entrepreneurship

Entrepreneurship is a dynamic process where people create incremental wealth. Wealth is created by the individuals who bear the main risk, in the form of capital, time, and commitment to a career risk in terms of providing value to the product or service. The product or service may not be new or unique, but still value to be created by the entrepreneur through efforts to achieve and allocate skills and resources required. From several views of experts, it can be concluded that entrepreneurship is a capability (ability) in thinking creatively and acting innovatively as the basis, the resources, propulsion, and processes to deal with life-style challenges. Schumpeter (1934) relates entrepreneurship to the concept

of innovation. Zahra and Shaker (1991) define entrepreneurship as innovation and strategy renewal. Casson (2005) defines entrepreneurs as people who take advantage of emerged opportunities to create new markets. Shane (2003) figures out that the entrepreneurial process comes from the perception on the availability of opportunity or a situation in which resources are transformed into a profitable business. The result of the study conducted by Lee and Hsieh (2010) concludes that entrepreneurship significantly influence innovation capabilities and performance. Several previous studies consider the entrepreneurial intensity as antecedents to the performance of the company. Entrepreneurial intensity affects the company's performance through Knowledge Integration Capability because it facilitates the process of creative destruction through the newly introduced innovations to gain a competitive advantage (Kim, Song, Sambamurthy, & Lee, 2011). The case study conducted by Lin, Miao, and Nie (2012) on the textile companies in Taiwan concludes that high entrepreneurial intensity affects innovation capabilities and encourages a sustainable innovation.

H1. Entrepreneurship significantly influences innovation capabilities

H2. Entrepreneurship significantly influences performance

2.3. Marketing capability

Innovations of products or services will not mean much if it does not achieve commercial success (Byrd, 2002). The company must develop the ability to market a new product or service. Baldwin (1995) in a study in Canada concludes that small and medium scale enterprises will be innovative when providing greater emphasis on the development of marketing capabilities, financial, production and human resources. Marketing capabilities in this study refers to the ability of the company to develop a range of aspects related to the marketing of products, including: distribution and promotion network. The study conducted by Lee and Hsieh (2010) about the correlation of marketing and innovation capabilities toward competitive advantage concludes that entrepreneurship directly influences marketing and innovation capability. Yet, it indirectly influences the company's competitive advantage (through marketing and innovation capability). Innovation capabilities directly influence the company's competitive advantage. The study conducted by Weerawardena (2003) concludes that there is a very strong effect of marketing capability on innovations. The study by Huhtala, Sihvonen, Frösén, Jaakkola, and Tikkanen (2014) finds that the orientation of the market as part of marketing capabilities significantly affects innovation capabilities and performance.

H3. Marketing capability significantly influence innovation capability

H4. Marketing capabilities significantly influence performance

2.4. Relational capital

Relational capital is a relationship with customers, suppliers, trademarks and trade names (which has a value only based customer relationship) license, and franchising. Youndt, Subramaniam, and Snell (2004) define *relational capital* as a resource that is associated with the company's external relationships with customers, suppliers, governments and industry associations. Moreover, Nahapiet and Ghoshal (1998); Subramaniam and Youndt (2005) state that social capital with customers, partners and suppliers is an important part of *relational capital*. The

study conducted by Mucelli and Marinoni (2011) on the role of relational capital and innovation by taking two cases of medium-sized companies in Italy successfully concludes that a company can become successful because of doing *relational capital* which makes it able to create production processes systematically. The study conducted by Rodrigues, Dorrego, and Jardon (2010) conclude that the automotive companies sector in Galicia Portugal can improve the process and product innovation through knowledge derived from the existence of network collaboration (*relational capital*). Moreover, the study by Kamaluddin and Rahman (2009) in Malaysia concludes that there is significant influence of *relational capital* and *mission culture traits* toward organizational effectiveness. Then, the study conducted by Ahmadi, Ahmadi, and Shakjeri (2011) on the correlation of *intellectual capital* (*human, structural and relational capital*) and the performance of the organization concludes that *human, structural and relational capital* directly or indirectly influence the performance of the organization. *Human capital* has a significant influence to organizational performance through *structural and relational capital*. Furthermore, *Structural capital* has a significant effect on organizational performance through *relational capital*. In addition, the study conducted by Capello and Faggian (2005) on the role of *collective learning and relational capital* toward the innovation process by taking a sample of 217 managers in Milan, conclude that relational capital has a significant impact on the company's innovation capacity.

H5. Relational capital significantly influences the innovation capability

H6. Relational capital significantly influences the performance

2.5. Empowerment

Empowerment of employees in the organization is characterized by greater communication between upper level management to the lower ones and increased capacity to respond to the environment. The authority is often delegated to a team or group and not individuals. Delegation of authority implies the presence of a delegation in terms of decision-making, but the range of authority and the opportunity to participate in the decision-making may vary. Thus, empowerment gives individuals an opportunity to participate in decision-making so as to improve the satisfaction of the group members in the organization (Boone & Hendriks, 2009). A number of behavioral science literature agree that employee empowerment can be beneficial to the individual as well as organization who adopt this policy especially the increase of job satisfaction (Vasugi, Kaviatha, & Prema, 2011). The main purpose of empowerment is a redistribution of power between management and employees in the form of increasing employees' authorities, responsibility and commitment. Individuals feel empowered when they feel and have adequate strength to cope with events, situations, or people they face (Conger & Kanungo, 1988). To have effective empowerment, management must adopt high practice involvement in which power, knowledge, information and rewards distributed to employees at the lower levels of the organizational hierarchy (Bowen & Lawler, 1995). Bogler and Somech (2004) identify six dimensions of empowerment; those are decision-making, professional development, status, self epic, autonomy and impact. Yukl and Becker (2006) has outlined some facilitator to effective empowerment effective are informal organizational structure, flexible, participation and learning culture, reward and recognition systems, non-routine and challenging work, access resources and funding, the level of autonomy and the election of the leader, the leader as a role model, mutual trust. The study

conducted by Cakar and Erturk (2010) on the influence of organizational culture and empowerment of small and medium enterprise innovation capabilities in Turkey concludes that organizational culture consisting of *power distance, uncertainty avoidance, collectivism* directly influences *empowerment*. Moreover, *Power distance, uncertainty avoidance and empowerment* directly influence innovation capabilities. Innovation has a direct effect on competitive advantage and it is in line with the study of Barney (1991) which concludes that the competitive advantage of each organization will require innovation or differentiation from competitors and high perceived value by customers which cannot be met by the products or services of other competitors (Wingwon, 2012). Moreover, the study conducted by Wingwon (2012) concludes that the innovation has effect on the company's competitive advantage.

H7. Empowerment significantly influences innovation capabilities

H8. Empowerment significantly influences performance

H9. Innovation Capability influences performance

H10. Performance significantly influences competitive advantage

3. Research methods

3.1. Sample and data collection technique

The population in this study is the woven industry throughout Troso Jepara consisting of 283 companies. The number of samples taken at 5% level of accuracy is 150 companies. The sampling uses non-probability (random) with a random *sampling* method based on the consideration that SMEs have been in operation for at least two years. Primary data are collected by using a questionnaire and interviews. The questionnaire is administered to the principal/owner of the woven industry in Troso Jepara. It covers business profile, the current corporate culture, employee empowerment, entrepreneur, marketing capabilities, relational capital, knowledge sharing capabilities and management of relationship to customers.

3.2. Operational definitions and measurement of variables

Indicator variables of entrepreneurship consist of innovation, initiative and risk-taking. Indicator variable of marketing capabilities consist of customer service, customer relationship management, market analysis and product differentiation. Indicators of Relational Capital consist of *relationship with customer, institutions supplier, shareholders*, and investors. Empowerment indicators consist of decision-making authority, information can be obtained by any person when necessary and able to have a positive impact, deal with the short and long term planning. Indicators of innovation capability consist of product, process, management and marketing innovation. Business performance is measured by using financial performance and marketing performance. Moreover, competitive advantage is measured by the product that is difficult to imitate, emulate high quality, lower costs, and higher profits than competitors. All of those indicators mentioned above are measured using a *Likert* scale of 1–5, in which 1 strongly disagree and 5 strongly agree.

4. Results of data analysis

4.1. Description of respondents

Based on the data analysis, it is obtained general overview of respondents, description of respondents answer and the results of

calculation of the influence of variables by using partial least squares (PLS).

Based on Table 1, it indicates that the majority of respondents of SME owners in Troso Jepara are in the range of 40–49, which include a productive age and mature in business. The majority of operations of SME in Troso Jepara are in the range of 10–15 years (52.42%). Judging from the scale of business with the indicator of the number of employees, the majority of SMEs in Troso Jepara possess total employees under 30 people (69.35%).

Description of respondents' answers on the indicator variables are shown in Table 2 below:

Based on Table 2, the average of entrepreneurship variable is in the high category, it means that the average SMEs in Troso Jepara has a high entrepreneurial spirit based on product innovation, initiative, risk-taking and intensity to get involved in the activities of the association membership. Business initiatives of woven industry in Troso Jepara is high enough, it means that they tend to develop their business by way of always looking for new ways and methods in solving problems associated with woven in Troso, particularly in the areas of product design as well as in the field of promotion and sales. The average ability of entrepreneurs to take risks associated with the business of woven in Troso is good. The decision to take risk is mainly related to the courage of the entrepreneurs to take for capital loans through cooperatives such as public handicraft cooperatives, mutual aid cooperative to cover production costs rather than to banks. On the other hand, cooperative capability in serving the needs of woven entrepreneurs in Troso is often limited, so the employers should also be willing to provide funds independently. Almost all woven employers in Troso Jepara participate in the membership of the association which is called by the woven association of Troso and textile of Jepara (ASSTIKA). The benefits of membership of the association are the mutual sharing of information (*knowledge sharing*) among members both in terms of product, marketing and capital. The activity such as staining training for association members of woven and textiles, training of capacity building of SMEs, promotion and sales through Central Presents Market of Jepara.

The average is also high for the category of marketing capability; it means that the majority of SMEs woven in Troso Jepara have good marketing abilities characterized by good market analysis, covering the market place, the extent and the characteristics of the market. Some of the market analysis are often done by Troso woven entrepreneurs, in particular, those who have penetrated the market nationally and internationally, such as the location of the market by opening outlets in various areas in Indonesia, online sales system,

Table 1
Description of respondents.

Variables	Amount	Percentage
Age		
30–39	32	25.81
40–49	54	43.55
50–59	38	30.64
Business operation		
1–5 Years	26	20.97
6–10 Years	43	34.68
10–15 Years	65	52.42
16–20 Years	19	15.32
21–25 Years	6	4.84
26–30 Years	3	2.42
Number of employees		
10–29	86	69.35
30–49	29	23.39
50–69	8	6.45
70–89	1	0.81

Data Source: Data processed in 2014.

Table 2
Description of variables and indicators.

Variables	Median	SD
Entrepreneurship	4.6	0.49
Marketing Capability	4.22	0.48
Relational Capital	3.64	0.31
Empowerment	4.03	0.67
Innovation Capability	4.48	0.50
Performance	4.48	0.50
Competitive Advantage	3.53	1.10

Source of data: Data processed in 2014.

the quality and quantity Troso woven, woven designs and models, right brand and pricing strategies. Yet, effective market analysis is only done by woven entrepreneurs of Troso whose market has been extensive, for those who are still in the traditional market (still around Jepara) is rarely done, because they are regarded to be passive in marketing and promoting their products. In general, the woven products of Troso Jepara are unique if compared to other weaves. Seen from the production aspect, Troso clothes material are made with traditional loom (*non-machine*) that have high artistic value through inheritance of the woven community in Troso Jepara. Woven industries in Troso produce *misris*, antiques, silk and natural woven with various shades. The advantage of their product is the ability of woven in Troso to adapt different styles from various cultures both nationally and internationally. Some type of product that differentiates it from other products such as blazer woven of Jepara, cloth, Baron, Blanket, woven cloth, fabric, *misris* cloth, *songket*, leaf motif cloth, T-shirt, prayer mats, beach sarongs, woven scarves, shawls, tablecloths and bags. The customer service includes in the medium category, which means that employers of woven yet fully capable of providing optimal service to customers.

The relational capital is in the medium category, which means that the ability of SMEs woven of Troso Jepara in relationship with external parties such as customers, suppliers, owners of capital and institution as a whole is still not optimal. The form of the customer relationship is either active or passive. Active customer relationships done by Troso entrepreneurs are by providing new product information to customers through online media, web and e-mail or through the medium of communication, especially for national customers such as from Jakarta, Bali, Bandung, Riau, Makassar, Sumbawa, NTT NTB, Flores, Lombok, Kalimantan, and Papua. The entrepreneurs are able to make payments with precise control over raw material supply, particularly, yarn of national and international supply. In other hand, suppliers are able to meet the needs of yarn materials as desired by the woven entrepreneurs in Troso. Until now, the raw materials used by woven employers in Troso are still largely imported from China. Raw materials of silk are 100% imported from China. Silk from the local are not good enough because the weaving process is difficult. While cotton and rayon are 50% imported from China, 50% of the local products obtained from Bandung. The majority of woven entrepreneurs in Troso do not obtain capital financing from banking institutions, so they rarely interact and engage with the banks. The average of woven employee relations is with external agencies such as the Central Java Provincial Government, the Government of Jepara, Jepara Kadin, which are still not optimal. This is reflected by the lack of cooperation in woven exhibitions by either the Provincial government or the district of Jepara, Central Java province. Likewise, the programs of training, marketing assistance and capital are still not optimal as well. Many woven entrepreneurs of Troso Jepara are passive in nature, both in product marketing, promotion and development of products based only on orders. In Average, the employee relations with the investors are still not optimal. These

are due to the woven employers in Troso continuing their business for generations and developing it together through an association or inter woven entrepreneurs cooperative. Business development is mostly done independently either through equity, loans from banking institutions or from the cooperative.

On average, empowerment of SMEs woven in Troso Jepara is in the high category in the field of decision-making authority, accessing to information for its employees, giving positive impact and follow the planning process.

On average innovation capability of SME entrepreneurs is in the high category in the field of innovation consisting of a new product, process, management and marketing innovation. Woven entrepreneurs in Troso agree that they are always doing both design and product innovation on an ongoing basis. This condition is indicated by the number of manufactured woven motifs and variations based products like clothing, tablecloths, prayer mats, bags, gloves, scarves, hoods, pillowcases, a paper towel, and *sarimbit*. Innovation in motif is done by digging their own ideas based on the tastes of the market, interpreting the idea of the customer, developing ideas from various references such as magazines and through the internet search. Innovation process is done by improving production system that starts from the quality of the raw materials imported from China, the merger between the use of loom machines (ATMs) with handloom results the more production capacity with a cheaper cost. Moreover, Innovation in marketing is done by producing a product in the form of woven fabrics, clothes, linen household with good quality. In addition, the system of promotion is done by opening a showroom in some cities outside Jepara, on-line sales and reservations through the opening of the website. Specifically, online sales and through the website are mostly done by businessmen who have massive production capacity and sales turnover. The majority of woven sales of Troso, Jepara to Bali are almost 99%, while the rest is distributed in Jakarta, Bandung, Sumatra, Kalimantan and Nusa Tenggara. Innovation in management is done by always doing good business management and improvements in financial, marketing, human resources and production management. In the field of marketing management, it is done by always following the exhibition organized by the event organizer, the Provincial Government of Central Java, Jepara regency government and export-oriented marketing strategies to some destination countries. In finance, payment systems purchase of raw materials for a period of up to 3 months can be done through SMS banking and internet banking transfer. Besides that, it is also done with cooperation with the banking party; while for small entrepreneurs still use the existing cooperatives. The development of human resource management is done by always doing *knowledge sharing*, joining training held by Kadin Jepara, Central Java provincial government and district government of Jepara.

On average, the performance of SMEs woven in Troso Jepara is high in the field of financial and marketing performance. The average in the number of customers, marketing reach, revenue and profits increases every year. Woven entrepreneurs of Troso are categorized as good. This condition is supported by the increasing number of people fond of Troso woven, many fashion designers use woven as a design material, local regulatory policies issued by the Central Java provincial government and local government related to the use of Jepara *batik* woven by civil servants on certain days and high demand from the tourist souvenirs get increase overtime.

On average, competitive advantage of SMEs woven in Troso Jepara is in the category of moderate or good enough. On average, the ability of woven company to produce difficult products to imitate by competitors is good enough. On average, the quality of the products if compared to other competitors in other place is good enough both in terms of materials, design and style. The average cost of production if compared to competitors is good

enough. This is supported by the ability to create innovation of products, processes, marketing and long experience (learning experience) of the craftsmen in the design of motive and the use of raw materials that support quality increase. Moreover, on average, the profit gained by entrepreneurs of batik woven in Troso if compared to competitors from other areas is good enough. This is supported by a growing demand for domestic and international community toward variants of woven products, especially in areas that have an attractive tourist destination.

4.2. Validity and reliability

Test on the validity is administered by using *Smart PLS* program by applying *convergent validity* size (See Table 3). From the results of *cross loading factor*, the value of *convergent validity* is as follow:

Each indicator is on average of >0.5 where for the value of 0.5 at the beginning of the study can be said to have a high value. Furthermore, each indicator of the study has value of >0.7. (Ghozali, 2006). Based on the results of the validity test has been done, it is known that all of the indicator variables of entrepreneurship, marketing, empowerment and innovation capabilities, performance and competitive advantage have the *estimate* value of the *original sample* of more than 0.7 and the value of the T-statistic is greater than T-table (1.67) which means that all indicators are valid and can measure its variables.

The results of *composite reliability* of each construct are good and above 0.7. According to Chin (1998), an indicator is said to have good reliability if the value is above 0.70, and it can be maintained

Table 3
Test of validity.

	Original sample estimate	The mean of subsamples	Standard deviation	T-statistic
Entre				
Etr1	0.697	0.729	0.164	4.237
Etr2	0.765	0.901	0.129	5.911
Etr3	0.935	0.957	0.016	57.263
Etr4	0.936	0.958	0.018	53.080
Marketing				
M.C1	0.945	0.904	0.057	16.517
M.C2	0.978	0.971	0.018	55.638
M.C3	0.959	0.929	0.049	19.624
M.C4	0.880	0.933	0.060	14.558
Relational				
RC1	0.919	0.957	0.057	16.045
RC2	0.988	0.991	0.005	186.532
RC3	0.991	0.993	0.004	226.685
RC4	0.990	0.991	0.005	209.090
RC5	0.986	0.988	0.005	199.706
Empower				
EP1	0.962	0.968	0.011	85.524
EP2	0.969	0.973	0.018	54.578
EP3	0.985	0.986	0.002	460.855
EP4	0.984	0.983	0.002	407.515
Innovation				
INOV1	0.970	0.971	0.006	164.768
INOV2	0.982	0.985	0.010	100.745
INOV3	0.984	0.986	0.004	227.559
INOV4	0.977	0.981	0.005	209.904
Performance				
P1	0.778	0.821	0.108	7.214
P2	0.832	0.850	0.046	18.110
P3	0.911	0.924	0.034	27.036
P4	0.958	0.956	0.007	130.684
SCA				
SCA1	0.985	0.977	0.008	121.128
SCA2	0.993	0.991	0.003	325.191
SCA3	0.992	0.989	0.003	297.201
SCA4	0.990	0.985	0.004	228.700

Source: data processed in 2014.

and accepted at a value of 0.50–0.60. As we know that the value for *composite reliability* of entrepreneurship, marketing, empowerment, performance and competitive advantage capabilities is more than 0.7. This value, if referred to the opinion of the Chin, has a good reliability and can be used for further study. The meaning here is that the indicators used in this study are in accordance with the conditions of the real object of study.

4.3. Findings and discussion

4.3.1. Findings

The results of data processing by using *Smart PLS* software tools obtain the model structure of the *loading factor* construct that would explain the correlation of the construct of psychological capital, spiritual leadership, job satisfaction and performance, which is shown in the following Fig. 1.

To determine whether hypothesis is accepted or not is by comparing t_{count} with t_{table} on the condition that if t_{count} is $> t_{\text{table}}$, then the hypothesis is accepted. For more details, it can be seen in Table 4 below.

Based on the results of the PLS analysis, it shows that H1 is accepted, there is a significant and positive influence of entrepreneurship toward innovation capabilities, which is indicated by the value *original sample estimate* of 0.287, the value of t -statistics of $1.927 > t_{\text{table}}$ (1.677). The higher the entrepreneurship is, the higher innovation capability will be. Furthermore, *Hypothesis 2* is also received; there is a significant and positive influence of entrepreneurship toward business performance. It is indicated by the value of the *original sample estimate* of 0.134, the value of t -statistics of $(1.737) > t_{\text{table}}$ (1.677). The higher the entrepreneurship is, the better the performance will become.

The result of testing *hypothesis 3 (H3)* is received, there is a significant and positive influence of marketing capability toward innovation capabilities as indicated by the value of the *original*

sample estimate of 0.245, the value of t -statistics of $(1.768) > t_{\text{table}}$ (1.677). The higher marketing capability is, the higher the innovation capability will be. Then, *Hypothesis 4* is also received, there is a significant and positive influence of marketing capabilities to business performance as indicated by the value of the *original sample estimate* of 0.112, the value of t -statistics of $(1.877) > t_{\text{table}}$ (1.677). So, the higher the marketing capability is, the better the performance will become.

Results of testing on *hypothesis 5 (H5)* is received, there is a significant and positive influence of relational capital toward innovation capabilities as indicated by the value of the *original sample estimate* of 0.148, the value of t -statistics of $(2.974) > t_{\text{table}}$ (1.677). The higher the relational capital is, the higher the innovation capability will become. Moreover, *Hypothesis 6* is also accepted, there is a significant and positive influence of relational capital toward business performance as indicated by the value of the *original sample estimate* of 0.226, the value of t -statistics of $(1.962) > t_{\text{table}}$ (1.677). Therefore, the higher the relational capital is, the better the business performance will be.

The test results on *Hypothesis 7 (H7)* is accepted, there is a significant and positive influence of empowerment toward innovation capabilities as indicated by the value of the *original sample estimate* of 0.422, the value of t -statistics of $(1.777) > t_{\text{table}}$ (1.677). The higher the empowerment is, the higher the innovation capability will become. Next, *Hypothesis 8* is also accepted, there is positive and significant influence of empowerment and business performance as indicated by the value of the *original sample estimate* of 0.327, the value of t -statistics of $(2.746) > t_{\text{table}}$ (1.677). The higher the empowerment is, the better the business performance will become.

Results of testing *hypothesis 9 (H9)* is received, there is a significant and positive influence of innovation capabilities toward the performance as indicated by the value of the *original sample estimate* of 0.217, the value of t -statistics of $(1.3451) > t_{\text{table}}$ (1.677). The

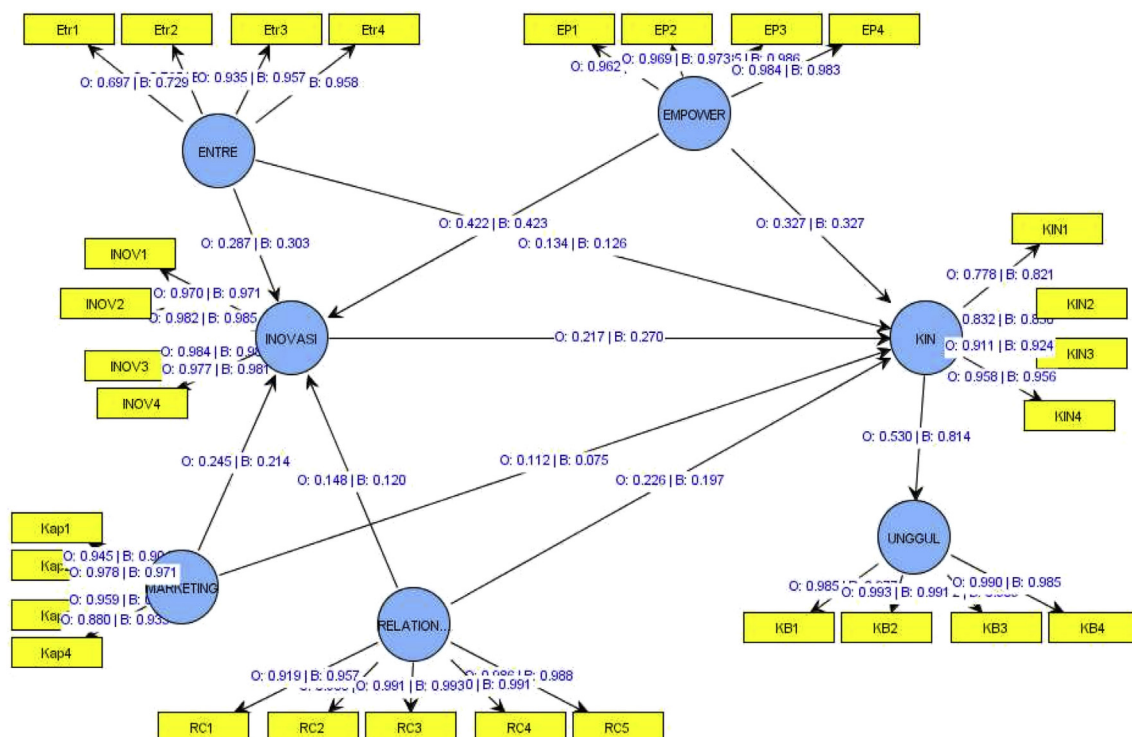


Fig. 1. Structural equation model results.

Table 4
Hypotheses test.

	Original sample estimate	The mean of subsamples	Standard deviation	T-statistic
Entrepreneurship -> Innovation	0.287	0.303	0.149	1.927
Marketing -> Innovation	0.245	0.214	0.147	1.768
Relational -> Innovation	0.148	0.120	0.152	2.974
Empowerment -> Innovation	0.422	0.423	0.307	1.777
Entrepreneurship -> Performance	0.134	0.126	0.182	1.737
Marketing -> Performance	0.112	0.075	0.088	1.877
Relational -> Performance	0.226	0.197	0.145	1.962
Empower -> Performance	0.327	0.327	0.439	2.746
Innovation -> Performance	0.217	0.270	0.481	3.451
Performance -> Competitive advantage	0.530	0.814	0.268	1.980

Data Sources: Primary data were processed, 2014.

higher the innovation capability is, the better the performance will become.

In the end, results of testing [hypothesis 10 \(H10\)](#) is received, there is a positive and significant influence of the performance toward competitive advantage as indicated by the value of the *original sample estimate* of 0.530, the value of t-statistics of (1.980) > t_{table} (1.677). The higher the performance is, the higher the competitive advantage will be.

Based on the above R square value, it indicates that the variation of innovation capability can be explained by entrepreneurship, marketing capabilities, relational capital and empowerment of 93.8%, the remaining 6.2% is explained by variation in other variables not included in the model. The Variations in performance can be explained by the variable of innovation capabilities of 87.3%, while the remaining 12.7% of the variation is explained by other variables not included in the model. Moreover, the variations of competitive advantage can be explained by the variable performance of 30.1%, the remaining 69.9% is explained by the variation of other variables that are not included in the model.

4.3.2. Discussion

The results of data analysis show that entrepreneurship significantly influences the capability of innovation and business performance. The higher the entrepreneurial spirit possessed by each member of the organization both in terms of product innovation capabilities, the ability to have the initiative, the ability to take risks and always be active in membership association activity will tend to encourage the growth of the innovation capability in the organization's members, both in the innovation of new product, process, management and marketing. The better the entrepreneurship will also drive business performance improvement of organization both financial and marketing performance. The findings of the study support the study by [Lee and Hsieh \(2010\)](#) on the correlation of *entrepreneurship* toward innovation capabilities and competitive advantage. In this matter, *Entrepreneurship* directly influences the innovation capability. Yet, it indirectly influences the company's competitive advantage (through marketing and innovation capability). Innovation capabilities directly influence the company's competitive advantage.

Marketing capabilities significantly influences the innovation capabilities and performance. The better the marketing capabilities of the organization in terms of customer relationship management, market analysis, product differentiation and customer service will further encourage innovation and business performance of the organization. The findings of the study support the study conducted by [Battor and Battor \(2010\)](#) which concludes that *customer relationship management capability* significantly influences innovation. Meanwhile, Innovation significantly influences the

company's performance. Innovation also mediates the influence of *customer relationship management capability* on company performance.

The relational capital significantly influences the innovation capability and performance. The better the relational capital (relationships with customers, supplier, owners of capital, institutions and investors) will enhance the ability of innovation and organizational performance improvement. The findings of the study support the findings of [Mucelli and Marinoni \(2011\)](#) which concludes that the company manages to succeed because doing *relational capital* that makes it innovate systematic production process. The findings of the study also support the findings of [Ahmadi et al. \(2011\)](#) which states that *relational capital* directly or indirectly influence the performance of the organization. Moreover, the findings also support the findings by [Capello and Faggian \(2005\)](#) who conclude that the *relational capital* has a significant impact on the company's innovation capacity.

Empowerment significantly influences innovation capabilities and performance. The better the empowerment in terms of decision-making authority, access to information, providing positive impact and following the planning process will encourage innovation capabilities and performance. The findings of the study support the findings by [Cakar and Erturk \(2010\)](#) who conclude that *empowerment* directly affect innovation capabilities.

Innovation capabilities significantly influence the performance. The higher the innovation capability in the form of new product, process, management and marketing innovation will improve financial and marketing performance. The findings of the study support the findings by [Battor and Battor \(2010\)](#), [Calantone et al. \(2002\)](#), [Hult et al. \(2004\)](#), [Keskin \(2006\)](#), [Panayides \(2006\)](#) and [Thornhill \(2006\)](#) which state that there is a direct and positive correlation of innovation and superior performance. Superior performance will also enhance the company's competitive advantage, in terms of products that are difficult to imitate by competitors, better quality than competitors, a cheaper cost and higher profits than competitors.

5. Conclusion and managerial implications

The results show the importance of innovation capabilities in improving the performance and competitive advantage. Good innovation capabilities in the organization will encourage innovation and sustainable product development. The results contribute to previous research related to the enhancement of the innovation capabilities. Corporate innovation capabilities can be enhanced through improving the spirit of entrepreneurship, marketing capabilities, ability of relational capital and the empowerment of employees in the organization. The higher the innovation capability produced by the organization, the better the business performance. Company's ability to generate financial and marketing performance will ultimately create a competitive advantage. For business owners SME, they need to pay attention to the importance of establishing a higher entrepreneurial spirit, optimizing the ability of market analysis, networking with various stakeholders and providing the opportunity for employees to use the authorization decision-making so as to encourage the creation of innovation capabilities that result in increased performance and achievement of competitive advantage. Based on the results of the study, innovation capability is essential in improving the performance and the competitive advantage of fashion creative industry, especially woven batik. Governments need to encourage and facilitate the development of fashion creative industry innovation capabilities through training in processes, products, management and marketing on an ongoing basis. Besides, it also needs to encourage the entrepreneurial spirit of entrepreneurs, facilitates networking with

various stakeholders of fashion through various exhibitions of products, regulatory policies that support the development of the fashion industry. Limitations of this study are still focused on fashion of woven batik industry in one province and it has not examined yet the role of innovation capability as an intervening variable of entrepreneurship, relational capital, empowerment and marketing capability toward performance and competitive advantage. Future study needs to examine the role of innovation capability as an intervening variable.

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