

# **Innovation Role in Mediating the Effect of Entrepreneurship Orientation, Management Capabilities and Knowledge Sharing Toward Business Performance: Study at Batik SMEs in East Java Indonesia**

Sri Wahyu Lelly Hana Setyanti<sup>1</sup>, Eka Afnan Troena<sup>2</sup>,  
Umar Nimran<sup>2</sup> and Mintarti Rahayu<sup>2</sup>

<sup>1</sup>(Doctoral Program of Management Science, Faculty of Business and Economics in Brawijaya University  
Malang East Java of Indonesia)

<sup>2</sup>(Department of Management, Faculty of Business and Economics in Brawijaya University, Malang East Java  
of Indonesia)

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**Abstract :** *This study is based on a phenomenon that occurred at Batik SMEs in East Java, Indonesia. Nowadays innovation is a critical issue in SMEs, especially in Batik SMEs. This is because batik has a social and economic uniqueness, and also the uniqueness is a product of culture and art. This potential will be one of great power in creative industries sector if dealt with seriously. This study aims to examine and explain the innovation role in mediating the effect of entrepreneurial orientation, management capabilities and knowledge sharing toward business performance of Batik SMEs in East Java. The unit of analysis is Batik SMEs in East Java. Survey respondents are 125 owners of Batik SMEs in East Java. This study uses a quantitative approach. Data analysis tool used is PLS (Partial Least Square).*

*The results showed that innovation role proved affect positively and significantly toward business performance improvement. Innovation becomes complete mediation in relationship between management capabilities and knowledge sharing toward business performance. Innovation becomes a partial mediation in relation to entrepreneurship orientation toward business performance. An important finding of this study are 1) be able to integrate the affect of entrepreneurial orientation, management capabilities and knowledge sharing toward business performance through innovation as a mediating variable, and 2) integrating the resources-based view (RBV) and knowledge-based view (KBV).*

**Keywords:** *Entrepreneurial Orientation, Management Capabilities, Knowledge Sharing, Innovation, Business Performance*

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## **I. Introduction**

Ministry of Commerce data show the potential of Batik SMEs increased. This was demonstrated by an increase in total transaction value of batik products by 56%, ie 2.9 trillion in 2006, rising to 3.9 trillion in 2010. In addition, the development of domestic market have pushed Batik SMEs in Indonesia to continues to grow, from 53,250 units with 873.510 labor in 2009 become 55,778 units with 916,783 worker in year 2011 [1]. This situation will certainly bring a positive affect. If the potential of batik can be improved, it will be able to reduce poverty and unemployment in Indonesia.

In addition to potential and opportunities, there are problems faced by Batik SMEs nationally. BPS data, processed Ministry of Commerce, shows the exports value of batik Indonesia and batik products continued to decline. In 2006, the total export value of Indonesian batik products was US\$ 74 million. This figure rose to US\$ 78 million in 2007. In 2008, the total export value of batik products increased to US\$ 93 million. The global economic crisis at the end of 2008 made batik exports gradually fell back to 18.34% become US\$ 76 million in 2009. In 2010, batik exports more sloping and decreased 8.91% to US\$ 69 million. Batik exports in 2011 reached US\$ 60 million, decrease of 13.34% over the previous year [1]. In addition to global economic crisis, this situation occurs because the increasingly competitive global market conditions. The entry of printing batik products from China, Japan and Korea to Indonesia are challenges faced by batik SMEs today [1].

Another problem faced is regarding innovation of Batik SMEs entrepreneurs itself, namely strong willingness of SMEs to constantly develop new ideas and creativity, which is generated through product, process and managerial innovation. Rapid flow batik garment import and difficulty to get young workers to create new motifs in accordance with market demand is a constraint faced Batik SMEs at this time. In addition, other constraints related to climate rivalry of Batik SMEs in East Java.

Several previous studies prove that a good resource become a determinant of business performance [2, 3, 4]. The findings of previous studies show that business success requires entrepreneur ability in operations [5].

In order to run the business successfully, an entrepreneur is expected to have the ability to implement management functions (entrepreneurial skills) that is consistent with entrepreneurship orientation concept. The approach in this study is resource based view (RBV), that all resources are assets such as expertise, organizational processes, attributes, information and knowledge held by the company and led the company to develop and implement strategies to improve the efficiency and effectiveness [6]. This study also uses knowledge based view (KBV) approach to clarify knowledge sharing role on Batik SMEs. Knowledge-based view approach states that if an organization wants to have a competitive advantage, it is important to master knowledge management, which included a knowledge sharing [7]. Knowledge sharing role for SMEs is considered as very important economic resource. Therefore, this study sought to integrate the resource-based view (RBV) and knowledge-based view (KBV) because knowledge is one of intangible assets as a competitive advantage source for organization [6, 7].

Various theories and research in entrepreneurship field has been able to explain very well the importance of role and impact the entrepreneurship orientation toward innovation and its affect toward business performance [8, 9, 10, 11]. A similar study has been done. The results showed entrepreneurship orientation affects insignificantly toward business performance [12, 13]. The inconsistent results of previous studies become interesting research gaps for further investigation. In this study, measurement of entrepreneurship orientation refers to previous research, with autonomous attitude, proactive attitude and courage to take risk indicators [11]. Previous studies [11] carried out in 25 SMEs in Sri Lanka. The results showed that entrepreneurship orientation affects significantly toward business performance.

Basically, entrepreneurship orientation is closely related to management capabilities an entrepreneur. The key to entrepreneurship is how to make right decisions with various calculations and reasoning [14]. The study will also examine the affect of management capabilities as it has been researched [15, 16]. The study findings suggest that management capability, if supported by good knowledge sharing, will be able to improve innovation and performance [17]. This study wants to reexamine contradiction of empirical studies on management capabilities variable and its affect toward business performance. This study attempted to fill a gap of previous studies that show that there is insignificant effect between management capabilities toward business performance [18, 19].

The novelty in this research is to prove whether knowledge sharing on Batik SMEs has very significant role in creating innovations to improve business performance Batik SMEs in East Java. Based on batik process, there are processes to see each other, and the interaction of imitation batik artisans will create the creative process in form of product innovation, or managerial processes that will give birth to exciting new design motifs. The study follows a suggestion (future research) study [10] to analyze the Knowledge Sharing variable to improve business performance in SMEs. Various studies on knowledge sharing in SMEs have also been done by [20,21,22]. The results show that knowledge sharing not only improve the business performance but also very beneficial for SMEs to face the uncertain business competition.

Innovation itself is divided into: product, process and managerial innovation [23]. With regard to innovation issue in SMEs, several studies have found inconsistent results. Empirical research shows that innovation has an affect toward business performance [24, 25]. While the results of previous studies [25, 26] showed different results that there is no affect between innovation toward business performance. Therefore, the originality of this study is to fill the research gap by offering innovation role to improve business performance. In addition, this study also examines innovation role in mediating the effect of entrepreneurial orientation, management capabilities and knowledge sharing and toward business performance. The purpose of this study is expected to SMEs, especially Batik SMEs, in future will further enhance innovation and business performance by improving the quality, production processes and have better managerial skills.

The study is divided into several sections, section 2 is theoretical study of resources based view (RBV) approach, knowledge based view (KBV), entrepreneurial orientation, management skills, knowledge sharing, innovation and business performance. Section 3 describes the development of hypotheses, Section 4 describes the research methods used, section 5 describes the research findings, part 6 convey the discussion of research and section 7 contains conclusions, suggestions, contributions and future research directions.

These research formulations are: 1) whether entrepreneurial orientation, mediated by innovation, affect toward business performance improvement of Batik SMEs in East Java? 2) Whether management capabilities, mediated by innovation, affect toward business performance improvement of Batik SMEs in East Java? 3) whether knowledge sharing, mediated by innovation, affect toward business performance improvement of Batik SMEs in East Java? 4) whether innovation affect toward business performance of Batik SMEs in East Java?

Purposes of study were: 1) examine and describe the effect of entrepreneurial orientation, mediated by innovation, toward business performance of Batik SMEs in East Java, 2) examine and explain effect of management capabilities, mediated by innovation, toward business performance of Batik SMEs in East Java, 3) examine and describe the effect of knowledge sharing, mediated by innovation, toward business performance of

Batik SMEs in East Java, 4) examine and describe the effect of innovation toward business performance of Batik SMEs in East Java.

This research has theoretical and practical benefits. Theoretical benefit of this research is to develop theoretical knowledge, particularly theoretical study on entrepreneurial orientation, management skills, knowledge sharing, innovation and business performance. Practical benefit of this research is to provide advice to the government as a model for the development of entrepreneurial empowerment for SMEs.

## **II. Fundamental Theories**

### **2.1 Resources Based View (RBV)**

RBV theory describe and classify the company resources as follows: all assets, capabilities, organizational processes, firm attributes, information, knowledge, and others that controlled by company and enables companies to formulate and implement strategies that will improve efficiency and effectiveness [6]. The resources are classified into three categories: 1) physical capital resources, include: physical technology used by the company, plant and equipment, geographic location, and access to raw materials; 2) Human capital resources, include: training, experience, opinions, intelligence, relationships and views of managers and employees to company, and 3) Organizational capital resources, include: corporate formal reporting structure, formal and informal planning, supervision, and coordination, as well as formal relationships among groups within enterprise and between enterprises and the environment [6].

RBV theory usually expressed as a strategic approach with two different views, namely the tendency to look capabilities that become core competitive position but remains affected by market forces [6]. RBV indirectly advise the company to focus on more efficient of resources utilization. Resources can be grouped into tangible resources, intangible resources and capabilities [27]. Tangible resources include: physical buildings, production equipment, raw materials and others. Intangible resources, including corporate reputation, name (brand), culture, technology, knowledge, patents and trademarks, as well as a collection of learning and experience. Capability is a complex combination of assets, people, and processes that companies use to transform inputs into outputs. Resources refer to the intangible asset. Resources can be financial and physical assets, licenses and patents, brand, reputation, expertise as trade secrets, processes and scientific knowledge and human capital, including networks, organizational culture and collective learning [3].

### **2.2 Knowledge Based View (KBV)**

Knowledge based view (KBV) approach illustrates that organization involved in producing, integrating and distributing knowledge. According to this approach, the organization's success is measured from the organization's ability to develop new knowledge based on their own resources. KBV approach also stated that core resources of organization are knowledge [7].

Previous research by [28, 29] suggests that knowledge-based organizations have more creativity and excellence than any other organization. Knowledge is the only source of sustainable competitive advantage. To produce superior performance, in addition to necessary resources and superior capabilities [28], it also need tacit knowledge in organizations to integrate, coordinate resources-resources and capabilities of organization [7]. In knowledge based view, organizational knowledge has an important position as a major source of organizational competence. The development of this view based on resources based view (RBV) approach [7]. According to this view, knowledge is contextual information, experiences, values and opinions of experts [28].

Knowledge-based view is concerned with how organizations create, acquire, apply, protect and transfer the knowledge. Furthermore, competitive advantage based on knowledge and the ability to continually develop is acquired. According to this view, the knowledge element is an important factor for the organization success [29].

### **2.3 Entrepreneurship Orientation**

Entrepreneurship orientation is organization desire to promote and support the creativity, flexibility and risk considerations. It demonstrates entrepreneurial process and to answer the question of how an activity implemented. Conversely, entrepreneurship terms related to the content of entrepreneurial decisions by asking what was done [8]. Previous research [30] concluded that knowledge-based resource and entrepreneurship orientation affect positively toward SMEs business performance. The findings of previous studies that entrepreneurship orientation has a strong relationship with business performance [8]. This study uses the concept from variable measurement of entrepreneurship orientation referring to past study [11].

In small businesses, entrepreneurial behavior manifested itself in two ways. First, on entrepreneur's effectiveness in managing their business. Secondly, with regard to business planning, attitude or response to market. Strategy usage always follows the character of entrepreneurs themselves. Entrepreneurship orientation of entrepreneurs can lead to business performance improvement [10, 11]. Previous research states that market

leaders often use the innovations and breakthroughs in doing business. In addition, the company expert in a particular field will increasingly necessary innovation [8, 11].

## **2.4 Management Capabilities**

Although researchers had different ideas on various attributes of managerial effectiveness, but basically there are three important components, ie appropriate behavior, motivation and ability (skill) [16]. This study specializing in managerial skills possessed by an entrepreneur. Managerial effectiveness is very important in achieving success in business world. Such behavior are [16]:

1. Controlling the organization environment and resources
2. Organizing and coordination abilities
3. Ability to handle information
4. A place to grow and develop
5. Able to motivate employees and deal with problems or conflicts
6. Able to solve strategic problems

Based on resource-based perspective, human resources aspect, such as attitudes, behavior and intelligence is critical to improve performance. Therefore, human resource development practice is part of process of extraction and utilization that can improve performance [6, 31]. Management capabilities is an important aspect for the organization, in addition to ensure employee understanding of what is expected by their organizations and provide them with the skills and knowledge to interact effectively with customers and others in company [31].

## **2.5 Knowledge Sharing**

Knowledge sharing is one step in knowledge management to provide an opportunity for group members, organization, or company to share the knowledge, techniques, experiences and ideas that they have to other members [22]. Knowledge sharing is the most important process in knowledge management [10, 21]. Knowledge sharing can only be done if each member had ample opportunity to express opinions, ideas, criticisms and comments to other members. A critical factor in implementing knowledge management in an SME is a knowledge sharing. Knowledge sharing implementation takes at least 6 (six) phases, namely creating, seizing, capturing, storing, processing, and distributing the knowledge. This includes the desire of each member organization to share knowledge [20, 21, 22].

## **2.6 Innovation**

Innovation is openness and usage of new knowledge, technology, and creativity process to create a product or service according to customer desires [31]. There are five types of innovation:

- 1) the introduction of a new product or a qualitative change in an existing product, 2) new process innovation to an industry, 3) new market opening, 4) new sources development to supply raw material or other inputs and 5) the changes in industrial organization [29, 31].

Innovation is transformation the knowledge to products, processes and services; action using something new [31]. Innovation is the successful exploitation of a new idea. In other words, innovation is the mobilization of knowledge, technological skills and experience to create products, processes and services. Innovation is the main function in entrepreneurial process [31]. Conventionally, the term is defined as a breakthrough innovation that relates to new products [23]. Innovation is a broader concept in discussing the application of an idea, a product or a new process and a high level of an individual or a unit in a system [26].

## **2.7 Business Performance**

The definition refers to the performance achievement level or company achievements within a certain time period. The company performance is crucial development of company. The company's goal consists of: continue exist (survive), to make a profit (benefit) and development (growth). It can be achieved if the company has a good performance. Performance can be seen from the company's sales, profitability, return on capital, turnover level and market share [30]. Business performance can be measured by seven indicators: number of complaint, return on investment, financial performance, sales growth, productivity, customer satisfaction and employment satisfaction [26]. Previous study [19] uses performance measurement indicators of growth in sales, growth in assets and profitability.

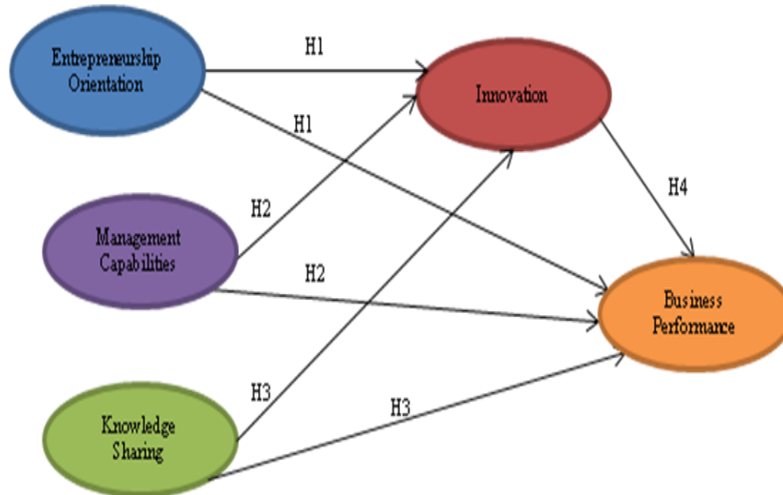
# **III. Conceptual Framework For Research**

## **3.1 Research Hypothesis**

The hypothesis of this study are follows:

- H1: The better the entrepreneurial orientation, mediated by innovation, the higher business performance of Batik SMEs in East Java.

- H2: The better management capabilities, mediated by innovation, the higher business performance of Batik SMEs in East Java..
- H3: The better knowledge sharing, mediated by innovation, the higher business performance of Batik SMEs in East Java.
- H4: The better innovation, the higher business performance of Batik SMEs in East Java.



**Figure 1. Research model and output PLS**

**3.2 Operational Variables Definition**

Entrepreneurship Orientation is capability that reflecting the SMEs preferences in strategic decision making and business operations through autonomous implementation, proactive attitude and courage to take risks. Operationalization of variables entrepreneurship orientation is result of research findings [11], based on previous study [8], namely autonomy attitude, proactive attitude and courage to take risks.

Entrepreneur management capabilities is a set of skills and competencies, both administrative and operative, in performing management functions that consists of ability to plan, organize, direct and implement the assignment and supervision. Management capabilities is measured by indicators developed from the study [16] which has been modified in accordance with the object study, namely: 1) ability to plan, 2) making a decision; 3) market share; 4) recognizing the market changes, 5) solving problem, 6) improving quality; 7) motivating employees; 8) delegation; 9) creating a marketing strategy; 10) well communication; 11) teamwork building, and 12) the ability to make a budget.

Knowledge sharing is the action taken by SMEs leader in knowledge acquisition, knowledge dissemination and responsiveness to knowledge, work experience, ideas, expertise and information to other employees. This study was developed from previous studies [20] which has been adapted to the object studied.

Innovation is an activity that leads to changes in product or service (technical) and production process as well as managerial that offered by the company to adapt to dynamic environment [23]. Innovation measurements in this study are based on product, process and managerial innovation. Business performance is output and capacity of all efforts made by organization to achieve its objectives. This study was developed based on the findings of study [19] namely growth in sales, growth in assets and profitability.

**Table 1 Research Instruments**

Variables	Indicators
Entrepreneurship Orientation (X1)	X1.1 Autonomy attitude
	X1.2 Proactive Attitude
	X1.3 Brave to take risks
Management Capabilities (X2)	X2.1 Capable to plan
	X2.2 Capable to make decisions
	X2.3 Capable to seize market share
	X2.4 Able to recognize changes in market
	X2.5 Capable to solve problems
	X2.6 Capable to improve the quality
	X2.7 Capable to motivate employees
	X2.8 Capable to delegate work
	X2.9 Capable to create a marketing strategy
	X2.10 Capable to communicate well

	X2.11 Capable to build teamwork
	X2.12 Capable to create a budget
Knowledge sharing (X3)	X3.1 Acquiring knowledge
	X3.2 Spreading knowledge
	X3.3 Response toward knowledge
Innovation (Y1)	Y1.1 Product innovation
	Y1.2 Innovation process
	Y1.3 Managerial Innovation
Business Performance (Y2)	Y2.1 Relative sales growth
	Y2.2 Growth assets
	Y2.3 Profitability relative

The variables is measured by Likert scale with 1 to 5 ranges. Range 1 indicates strongly disagree, 2 indicates disagree, 3 indicates normal /neutral, 4 shows agree, 5 indicates strongly agree.

#### IV. Research Methods

##### 4.1 Population and Sample

This study uses a quantitative approach. The research was conducted on Batik SMEs in East Java. The study population was 1.895 Batik SMEs in East Java . Based on two-stage sampling method, the sample locations are Batik SMEs in Sidoarjo, Jember, Tulungagung, Tuban and Bangkalan. Sample areas defined by using judgment sampling, where samples were selected using certain considerations according with research purpose or research problems developed. The area was selected based on criteria 1) Represents districts that having more than 100 Batik SMEs, 2) In line with strategic plan of Department of Cooperatives and SMEs in East Java 2009-2014, the regional economic development priorities based on regional development dimension is determined by each region.

Samples for each of selected districts are determined by proportional random sampling. That is, the sample taken randomly in each region population. Sample size of each region is proportional to magnitude of subject area concerned [32]. Determination samples is based on assumptions that must be met in data collection and processing procedures. Therefore, the study samples are 125 entrepreneurs Batik SMEs in East Java .

##### 4.2 Data Collection

Data collected in this study are two types: primary and secondary data. Primary data was collected by distributing questionnaires directly to the 125 respondents. Once, it is done in-depth interviews. The goal is to get a clear picture of information and what the conditions on field, what innovations ever made and how business performance of SMEs Batik.

##### 4.3 Data Analysis Methods

This study used two types of analysis, namely descriptive and quantitative techniques or inferential statistical analysis to data obtained in field. Descriptive analysis is used to describe more deeply each variable in this study. Quantitative techniques are used to see how strong the effect between independent variables and dependent variables, by analyzing the data with Likert scale score [32].

Causal relationships are defined in this study using a model that is not simple. The variables in model has a recursive relationship. This causal relationship requires analytical tools that are able to explain the relationship, so the inferential statistical methods used to analyze data of this research is based-variance SEM analysis of Partial Least Square (PLS). The inner model is the relationship between entrepreneurship orientation (X1), management capabilities (X2), knowledge sharing (X3), innovation (Y1) and business performance (Y2). Outer model (measurement model) specifies the relationship between indicators of latent variables.

Based on summary results for validity and reliability of instrument, all study variables are valid, because all indicators have correlation coefficient greater than 0.30 and Cronbach alpha greater than 0.60. That is, all statements items that serve as instrument are a reliable. It can be concluded that all point (item) statement used to measure entrepreneurship orientation variables (X1), management capabilities (X2), knowledge sharing (X3), innovation (Y1) and business performance (Y2), is valid and reliable. Therefore, the questionnaires used are valid and reliable or have an acceptable level of reliability as instruments to measure each indicator variable and subsequent data analysis [33].

#### V. Analysis And Results

##### 5.1 Respondents Characteristics

Respondent’s characteristics describe the characteristics of Batik SMEs entrepreneurs as sample of this study. Most respondents are female (68%). Majority of respondents aged between 38-45 years (38.40%). Business experience most of respondents were between 16-20 years (34.40%). The majority respondents (45.60%) produced handmade batik. Majority respondents have employees between 18-24 people (36.80%).

Majority respondent's education level are high school/equivalent (58.40%). Based on the results of annual sales, 33.60% respondents has annual sales between Rp. 75 million to Rp. 149 million.

**5.2 Linearity Test Assumptions**

Before making more evaluations with Partial Least Square (PLS), it is necessary to test the linearity assumption, namely weather relationship between latent constructs tested had a linear relationship. Linearity test aimed to see whether the model used is a linear model. The results of linearity test relationships between variables are presented in Table 2.

Linearity test result in Table 2 shows that relationship between entrepreneurial orientation, management capabilities and knowledge sharing toward innovation and business performance is linear, with the significance level is less than 5 percent ( $p > 0.05$ ). It can be concluded that all the relationships between the variables in structural models are linear. Therefore, it meet linearity assumption. Thus, further analysis can be done.

**Table 2 Test Results Linearity Assumption**

Variable Relationship		Linearity test result			
Exogenous variable	Endogenous variable	R <sup>2</sup>	F	Sig.	Desc.
Entrepreneurship orientation (X <sub>1</sub> )	Innovation (Y <sub>1</sub> )	0.531	139.269	.000	Linear
Management capabilities (X <sub>2</sub> )	Innovation (Y <sub>1</sub> )	0.606	188.841	.000	Linear
Knowledge Sharing (X <sub>3</sub> )	Innovation (Y <sub>1</sub> )	0.138	19.749	.000	Linear
Entrepreneurship orientation (X <sub>1</sub> )	Business Performance (Y <sub>2</sub> )	0.496	121.170	.000	Linear
Management capabilities (X <sub>2</sub> )	Business Performance (Y <sub>2</sub> )	0.525	136.022	.000	Linear
Knowledge Sharing (X <sub>3</sub> )	Business Performance (Y <sub>2</sub> )	0.082	11.074	.001	Linear
Innovation (Y <sub>1</sub> )	Business Performance (Y <sub>2</sub> )	0.655	232.998	.000	Linear

**5.3 Evaluation of Goodness of Fit Model**

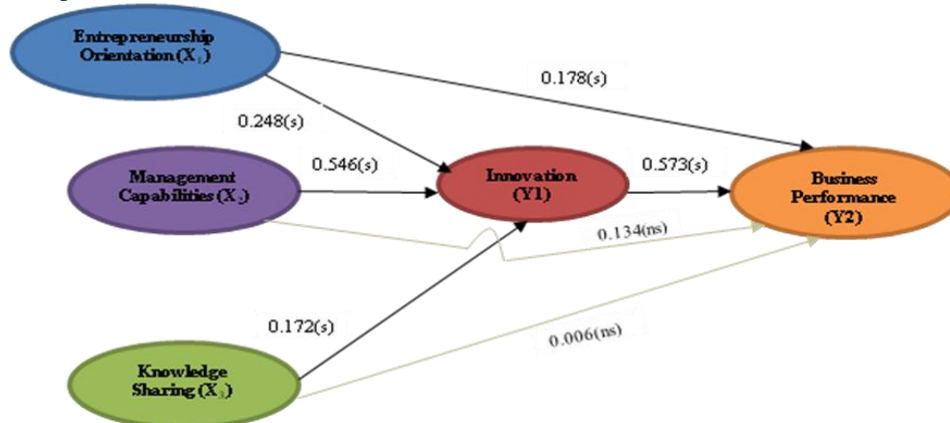
The calculations show the predictive value-relevance is Q<sup>2</sup> = 0.717 or 71.70%. That is, accuracy or timeliness of this research model can explain variance of entrepreneurship orientation, management capabilities, and knowledge sharing toward innovation and business performance of 71.70%. The remaining 28.30% is explained by other variables that are not included in this research model.

**Table 3 Goodness of Fit Test Results**

Structural Model	Endogenous Variable	R-square
1	Innovation (Y <sub>1</sub> )	0.677
2	Business Performance (Y <sub>2</sub> )	0.691

**5.4 PLS (Partial Least Square) Analysis**

The test results in Figure 3 shows that from seven direct effect tested, there are five have significant effect, namely: (1) a entrepreneurship orientation affect significantly toward innovation, (2) management capabilities affect significantly toward innovation, (3) knowledge sharing affect significantly toward innovation, (4) entrepreneurship orientation affect significantly toward business performance, and (5) innovation affect significantly toward business performance. While there are two insignificant, namely: (1) management capabilities affect insignificantly toward business performance, and (2) knowledge sharing affect insignificantly toward business performance.



Note: (s) = significant at  $\alpha = 0.05$ , (ns) = not-significant

**Figure 2. Diagram for hypothesis testing and path coefficient for PLS**

**Table 4 The Direct Path Coefficient**

Direct Effect		Path Coefficient	t-statistic	p-value	Description
Eksogen	Endogen				
Entrepreneurship Orientation (X <sub>1</sub> )	→ Innovation (Y <sub>1</sub> )	0.246	2.578	0.011	Significant
Entrepreneurship Orientation (X <sub>1</sub> )	→ Business Performance (Y <sub>2</sub> )	0.178	2.106	0.037	Significant
Management Capabilities (X <sub>2</sub> )	→ Innovation (Y <sub>1</sub> )	0.546	5.926	0.000	Significant
Management Capabilities (X <sub>2</sub> )	→ Business Performance (Y <sub>2</sub> )	0.134	1.621	0.108	Not Significant
Knowledge Sharing (X <sub>3</sub> )	→ Innovation (Y <sub>1</sub> )	0.172	2.187	0.031	Significant
Knowledge Sharing (X <sub>3</sub> )	→ Business Performance (Y <sub>2</sub> )	0.006	0.142	0.887	Not Significant
Innovation (Y <sub>1</sub> )	→ Business Performance (Y <sub>2</sub> )	0.573	6.783	0.000	Significant

**Table 5 The Indirect Path Coefficient and Hypothesis Testing**

Indirect effect (Mediation)			Path Coefficient	Description	Nature of Mediation
Eksogen	Mediasi	Endogen			
Entrepreneurship Orientation (X <sub>1</sub> )	→ Innovation (Y <sub>1</sub> )	→ Business Performance (Y <sub>2</sub> )	0.141	Significant	<i>Partial Mediation</i>
Management Capabilities (X <sub>2</sub> )	→ Innovation (Y <sub>1</sub> )	→ Business Performance (Y <sub>2</sub> )	0.313	Significant	<i>Complete Mediation</i>
Knowledge Sharing (X <sub>3</sub> )	→ Innovation (Y <sub>1</sub> )	→ Business Performance (Y <sub>2</sub> )	0.099	Significant	<i>Complete Mediation</i>

The test results the indirect effect path coefficients (mediation) in Table 5 shows that effect entrepreneurship orientation toward business performance through innovation is a partial mediation. This means that relationship between entrepreneurship orientation variables can directly affect business performance, as well as through innovation as mediation. Furthermore, innovation is significantly affected by management capabilities knowledge sharing and innovation and significantly affect business performance. But management capabilities and knowledge sharing directly have insignificant effect toward business performance. Therefore, innovation variables can be considered as complete mediation. That is, the relationship between management capabilities and knowledge sharing are insignificant toward business performance, but through the innovation as mediation able to significantly affect business performance.

Hypothesis testing shows the following results. (1) Hypothesis 1 received, the entrepreneurship orientation, mediated by innovation, can improves business performance. (2) Hypothesis 2 is received, management capabilities, mediated by innovation, can improve business performance. (3) Hypothesis 3 received, knowledge sharing, mediated by innovation, can improves business performance and (4) Hypothesis 4 is accepted, that high level innovation can improve business performance.

## VI. Discussion

### 6.1 Innovation role In Mediating the Effect of Orientation Entrepreneurship toward Business Performance

The results showed innovation becomes partial mediation the effects of entrepreneurship orientation toward business performance. These findings shows that entrepreneurship orientation directly affects business performance. These findings extend previous research by examining the relationship between entrepreneurial orientation, innovation and business performance [14]. Using 398 samples SMEs in Malaysia, one of study results concluded that innovation mediates the effect of entrepreneurship orientation toward business performance of SMEs. This is consistent with research result that final result of business performance depends on a high degree of innovation [31, 34]. If the company is able to increase the entrepreneurial orientation, innovation will be able to provide a positive affect toward business performance improvement. The study



findings provide the concept of effective entrepreneurship orientation development and the innovative behavior of entrepreneurs to face market dynamics.

Interviews with some respondents of Batik SMEs in East Java show that innovation is needed in creative process of batik creation, expansion the existing production processes and beneficial for marketing activities of batik products on market. Product innovation can be seen from the quality of batik produced, such as writing, and stamp combination batik. Some batik craftsmen in East Java has known batik dyeing process that has been known in Central Java. They learned batik from Central Java to absorb knowledge and inspiration of new coloring techniques. The statement explained that innovation can arise if it based on entrepreneur characteristics who has attitude to always outperform its competitors. This will bring innovation and ultimately improve business performance of Batik SMEs in East Java, as stated in earlier results that a good entrepreneurship orientation will enhance SME innovation that will ultimately improve the performance [35].

The results of this study extend the research [14,35] which concluded that innovation is a partial mediator between entrepreneurship orientation and business performance. Previous research conducted with a sample of 368 SMEs Malaysia. It showed that entrepreneurship orientation was required as a key factor to create high products quality to encourage increased business performance. The nature and specific characteristics of SME is keen to see the opportunities and creative to use its resources. It makes SMEs to survive and win the competition [35].

### **6.2 Innovation role In Mediating the Effect of management capabilities Toward Business Performance**

Referring to indirect test, path coefficients the effect of management capabilities toward business performance, mediated by innovation, shows positive values (Table 4). This result means that management capabilities has insignificant direct effect toward business performance, but through the innovation mediation, it significantly can affect business performance of Batik SMEs in East Java.

The study result support the concept [16] which states that if you want to run a business successfully, it is necessary to maintain good management capabilities. These study findings confirm the management skills theory [36] which states that an entrepreneur, in addition to having a creative talent, also must understand good management to create innovations in their work.

Empirical facts (mean) showed that majority of respondents said innovation has been implemented. Management capabilities, based on respondents' assessment, described by its ability to recognize changes in market and ability to build teamwork, while innovation is explained by product innovation. Business performance described by relative profitability. The results of this study reinforce the notion that innovation is an outcome of management capabilities to be able to produce high performance [15]. That is, management capabilities that managed rightly will generate innovation that needed for business performance excellence.

### **6.3 Innovation role in Mediating the Knowledge Sharing Effect toward Business Performance**

Innovation in this research model is a complete mediation variable. That is, knowledge sharing directly has insignificant effect toward business performance, but through innovation mediation, it can significantly affect business performance. Thus, there is ample empirical evidence that good knowledge sharing significantly affect toward business performance improvement, which is mediated by innovation.

These findings confirm previous research that knowledge sharing will affect significantly through innovation as antecedents [24]. Knowledge sharing effect toward innovation also included in study [9, 10, 20]. Knowledge sharing implementation will provide excellent benefits for business performance improvement of SMEs, such as increased competitive advantage [37], improved financial performance [38, 20, 21], increased innovation and networking products [39]. Support from employers of Batik SMEs itself is absolutely necessary for the success and benefits of knowledge sharing implementation [40].

The results of this study support the knowledge-based view of firm [7, 41] about the concept of knowledge sharing as a central mechanism in any organization to leverage affect business performance improvement. Referring to the RBV theory [6], the findings of this study provide insights to integrate the resource-based view and the knowledge-based view. In this case the knowledge sharing serve as capability for Batik SMEs that leverage organizational capabilities as a unique resource and can not be copied perfectly to achieve superior performance as source of sustainable competitive advantage.

### **6.4 Innovation capability effect Toward Business Performance**

These study findings provide empirical evidence that innovation, reflected through product innovation, can increase assets growth as a reflection of business performance of Batik SMEs in East Java. The results of this study confirms innovation theory [42] which states that simultaneous innovations can improve business performance. That is, a good innovation can support business performance improvement. Innovation is an important function in management, and has a direct effect toward performance. The results of this study extend research studies [23, 24] who found a positive effect of innovation toward business performance.

Batik SMEs Innovation also encouraged the emergence of new success ideas that reflected on product, process and managerial innovation. Product innovation is a factor preferred in practice, measured by the ability to increase the novelty of product produced as compared to competitors, improving the new product quality that produced, quicker development of new products compared to competitors. SMEs current is required to produce good quality products, creative motifs and batik dyeing and innovation in new product development. Empirical facts show that product innovation is the most preferred factor in the implementation. These results confirm the findings [43] that product innovation are important determinants of business performance.

Interviews with respondents, employers of Batik SMEs in East Java, shows that Batik SMEs recognize the threat came from invasion of batik printing products which can be easily found in market. Therefore, batik SMEs constantly make new innovations in creating new motifs and classical motifs creation and then adjusted to the current market demand.

This study is contrast to results of studies [25, 26] which concluded that innovation has insignificant effect toward performance. The results of previous studies [25] were carried out with a sample of 333 small businesses in South Korea. The results show that innovation has significant negative effect toward performance. The analysis technique used was LISREL with a Likert scale of measurement.

### **VII. Research Originality And Implication**

This study contributes to theoretical development of management science, particularly entrepreneurship orientation theory, management skills, knowledge sharing and innovation to improve business performance, both directly or indirectly, based on the resource-based view of firm [6, 7, 27 ], the theory of entrepreneurship orientation [8]. This study also contributes to theoretical knowledge-based view of firm [7, 42].

The resource-based view of firm stresses that organization resources can be a resource that enables organizations to have internal resources to encourage organization competitive advantage [6]. The study's findings also strengthen the resource-based strategy approach. This strategy emphasizes the role of resources and organization capabilities as basic principles of strategy and organizational profitability determinants [7].

Theoretical contribution of this study also reinforces the entrepreneurship theory with emphasizing that entrepreneurship orientation is a process, practice and decision-making activities that lead to the development and creation of new and innovative products that can differentiate an organization with other organizations in market [8]. It is important for SMEs to continue to maintain a good level of entrepreneurship orientation to achieve high business performance.

The results of this study also support the knowledge-based view of firm. The concept of knowledge sharing is a central mechanism in any organization to leverage the affect of organization business performance improvement [7]. The knowledge sharing concept in this study is also one novelty because not many studies examine in depth the implementation of knowledge management, particularly the implementation of knowledge sharing in SMEs.

Implications of study are entrepreneurs of Batik SMEs need to understand the constraints in promoting innovation in order to support the new products development that have a competitive advantage in marketplace. Some entrepreneurs Batik SMEs have concerns in marketing the product. Therefore, it is time entrepreneur of Batik SMEs to develop informal mechanisms actively, which is considered the most applicable to small and medium enterprises in sharing and exploiting knowledge that determine the quantity and quality of decision-making that qualified for Batik SMEs, so knowledge creation process will take place more quickly and effectively.

### **VIII. Conclusion, Limitations And Future Research**

This study results show the important role of innovation as a mediating link between entrepreneurial orientation, management capabilities and knowledge sharing toward business performance. Innovation can provide significant and tangible contribution to support business performance improvement on Batik SMEs in Java, as a partial or complete mediation. The results also showed that high innovation can improve business performance. These results indicate that indicator of product innovation implementation became priority and have dominant contribution to reflect innovation. Meanwhile, growth in assets is the most important indicator to reflect business performance measurement. That is, an increase in product innovation can determine which assets growth as a reflection of business performance, thereby providing a significant contribution toward business performance improvement of Batik SMEs in East Java .

This research limitation is not using control variables, such as age entrepreneur. Most older entrepreneurs showed a more conservative attitude in running the business than younger entrepreneurs. The study also does not distinguish between Batik SMEs managed by men and women entrepreneurs. Women employers of Batik SMEs seem more willing to take risk and be more proactive in running their business than men.

Accuracy and precision of model is 0717. This means that variance of entrepreneurial orientation, management skills, knowledge sharing, innovation and business performance variables can be explained by the model by 71.70% and the remaining 28.30% explained by other variables. Therefore, further research could develop a research model by adding other variables such as the characteristics of business environment, market orientation, culture or developing quality measurement models such as business performance, namely: customer delivery performance. In additions, the object and scope of study's respondents can be advanced, not just Batik SMEs in East Java but throughout Indonesia.

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