

Performance of the Craft Industry "Cukli": Product Innovation, Management Capability, Learning Capability, Technological Capability, Customer Orientation as a Determinant

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Abstract: Organizations need capabilities and customer orientation to achieve multiplier performance. For this reason, it is necessary to study the analysis of the influence of customer orientation, product innovation, management capability, learning capability, technology capability, on organizational performance. "Cukli" handicrafts in the city of Mataram, Lombok Island are the center of study in this research. Information obtained in the field, collected through observation and interviews with questionnaires. Respondents were assigned as many as 125. To achieve the research objectives used SEM-PLS. This study shows that customer orientation affects product innovation. Technological capabilities and product innovation affect organizational performance. Therefore, companies need to pay attention to customer orientation, product innovation, and technological capabilities to improve performance. Researchers advise companies to improve innovation capabilities, diversify products, participate in education and training, technological capability, and develop a culture of customer-oriented behavior.

Index Terms: Capability, customer orientation, business performance

I. INTRODUCTION

SMEs have the potential to develop in Indonesia,. This can be seen from the number of business people who have increased by 64.19 million [1]. And provide a fairly large income to the Gross Domestic Product (GDP), which is Rp. 8.6 trillion. Cukli handicrafts on the island of Lombok are one of the SMEs that play a role in improving the regional economy and community welfare. The obstacles faced by this industry are management, technology, and the capability to produce products according to market tastes.

Salisu & Lily [2] explained that organizational performance is influenced by today's competitive competition. Celtekliligil & Zafer [3] stated that management skills are needed to improve performance. Technological capabilities relate to new products produced by the company [4]. This determines the success of an organization in an industry. Companies can create product innovations through market analysis.

Studies from Celtekliligil & Zafer [3] show that management ability has a direct effect on product innovation and performance. Learning ability has a direct effect on organizational performance [5], [2]. Technological capabilities have a direct effect on organizational performance [2], [6]. Product innovation has a direct effect on organizational performance [7], [8]. Customer orientation and technological capabilities have a direct effect on product innovation [4]. Cukli is a craft made of wood. This craft is combined with shells, resulting in a decent product. This product is marketed at home and abroad. Currently, the average product sales have decreased. The problems faced by the Cukli handicraft industry include a business model that is not in accordance with current conditions, lack of ability in product design, distribution and promotion. Therefore, we need a business concept that leads to capability and customer orientation to improve organizational performance which ultimately achieves industrial competitiveness.

II. LITERATURE REVIEW

Customer Orientation

To create superior value, companies must be customer oriented. Customer orientation is the establishment of the belief that the customer is the first attraction in developing the company's long-term profits. And not based on the interests of other stakeholders such as owners, managers and employees. Customer orientation has a direct effect on product innovation [4] & [9]. The hypothesis is as follows:

H1: Customer orientation affects product innovation

Management Capability

To identify competencies, a resource-based business model is needed [10]. It is further explained that an organization that focuses on resources can improve performance and competitiveness. In this case, resources include assets, capabilities, processing, attributes, knowledge, and skills possessed by a company and can be used to formulate and implement competitive strategies. According to Celtekliligil & Zafer [3], management capability is a strategy that is applied in an integrated manner in recruiting, developing, and retaining employees to meet organizational resource needs. Management ability has a direct effect on product innovation [3] and performance [11].

Hypothesis formulation:

- H2: management capability affects product innovation
- H3: management capability affects performance

Technological Capability

Knowledge-based skills to produce new technologies are called technological abilities [12]. The results of research from Ahmad, et al. [6] found that technological ability has an effect on performance. Salisu & Lily [2] state that companies can identify, acquire, and apply new knowledge with their technological capabilities. The aim is to develop operational competence towards competitiveness. Technological capabilities affect product innovation [4] and performance [2] & [13].

- H4: Technological capabilities affect product innovation
- H5: Technological capabilities affect performance

Product Innovation

One way to achieve long-term sustainability and prosperity is through product innovation. Pearce II & Robinson [14], define innovation as the initial commercialization of an invention by producing and selling a new product, service, or process. To create a worthy product for sale, innovation is needed by using new knowledge [15]. Thus, product innovation means introducing new characteristics and uses to customers. Product innovation affects performance [8] & [16].

- H6: Product innovation affects performance

Learning Capability

To improve long-term viability, strategic leaders need to build on organizational learning [15]. With learning, companies can adapt to changes that occur during an increasingly competitive market, be more creative, and innovative, and achieve business success. Uğurlu & Mustafa [17] stated that learning ability includes the features that make up the organizational learning process. Learning skills is intended for to develop new management techniques, create innovative products and processes, and improve performance. Organizations can survive in conditions of intense competition depending on the desired and required performance [3]. Learning capability affects performance [18]. The proposed hypothesis:

- H6: learning capability affects performance

Theoretical Framework

The conceptual framework of this research is as follows:

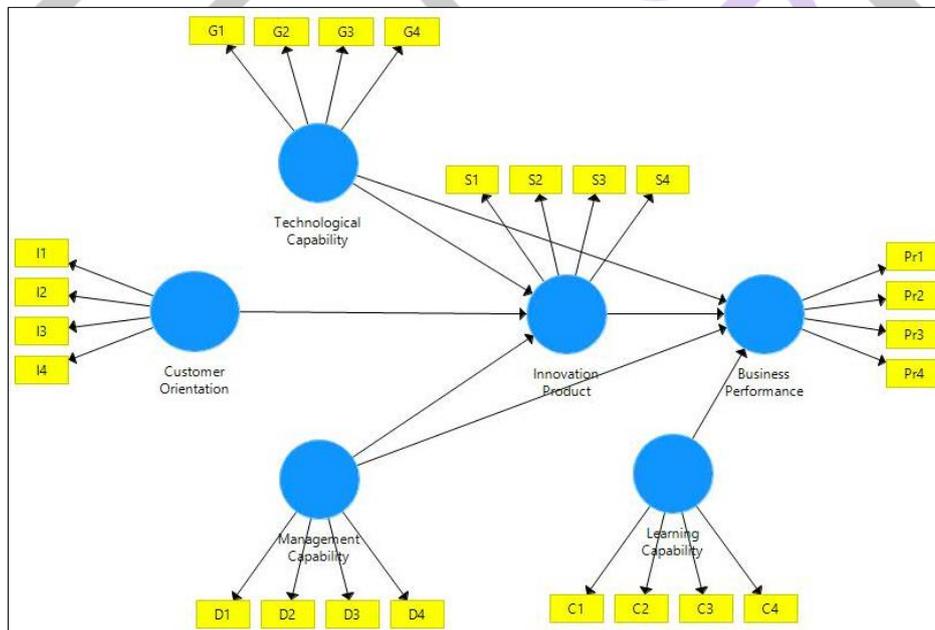


Figure 1. Research Framework

III. RESEARCH METHODS

In this study using a quantitative approach. Explanatory research is used to explain the causal relationship between the variables studied. The city of Mataram, was used as a research area. To take the sample, the researcher used the purposive sampling technique. The criteria are craftsmen who are on the island of Lombok and have creativity in producing products. The number of samples is set at 125. This is based on the analytical tool used, which is *Structural Equation Modeling* (SEM). For the maximum likelihood estimation method, Ghozali [19] recommends a sample size of 100-200. SEM PLS is used in this study to determine whether or not there is a relationship between latent variables. And analyze the constructs formed with reflection indicators and formative indicators. Observations and interviews with questionnaires were used to collect research data. The questionnaire is composed of several items including product innovation, management capability, learning capability, technological capability,

customer orientation, and performance. A Likert scale with a score of 1-5 points is used to rank each tip item. Technological capabilities, management capabilities, and learning capabilities each consist of four items, adaptations of Salisu & Lily [2]. Product innovation, consisting of four items, adapted from Lukas & Ferrell [20]. Customer orientation consists of four items, adapted from Acar *et al.* [21]. The business performance consists of four items, adapted from Huda *et al.* [22].

IV. RESULTS & DISCUSS

Results

Cukli craftsmen on the island of Lombok are dominated by the age of 30-40 years (50.4%), male (72%), elementary school education (60%), their main occupation is craftsman (84%), have become craftsmen more than 10 years (72%), with the length of entrepreneurship, proves that this small business can relatively survive in various situations. With the age of 30-40 years, it shows that most of the craftsmen are in productive age. And tend to be more creative and innovative in producing products.

Confirmatory Factor Analysis

This study begins by testing the validity of convergent, discriminant, and composite reliability. Convergent validity of each indicator construct can be seen from the loading factor value [19]. For confirmatory research, the loading factor value is above 0.7 and for exploratory research, it is above 0.6. After testing, it appears that only one has been deleted, which are G4 (0.688) and Pr1 (0.374). Table 1 shows the outer loading after G4 and Pr 1 are removed. All construct indicators have a loading factor above 0.7. This has met the requirements of convergent validity so that the test can be continued.

Table 1. Outer Loading (Measurement Model)

Indicator variable	Business Performance	Customer Orientation	Innovation Product	Learning Capability	Management Capability	Technological capability
C1				0.860		
C2				0.865		
C3				0.802		
C4				0.878		
D1					0.912	
D2					0.804	
D3					0.774	
D4					0.742	
G1						0.843
G2						0.882
G3						0.737
I1		0.859				
I2		0.880				
I3		0.810				
I4		0.813				
Pr2	0.913					
Pr3	0.920					
Pr4	0.854					
S1			0.872			
S2			0.819			
S3			0.811			
S4			0.805			

Each variable indicator was tested for significance by bootstrap analysis. The requirement is that the significance value must be < 0,05. Table 2. Shows the value of discriminant validity with cross-loading.

Table 2. Summary of Discriminant validity

	Business Perform.	Customer Orienta.	Innovation Product	Learning Capability	Managt. Capability	Techno. Capability
Business Performance	0.896					
Customer Orientation	0.718	0.841				
Innovation Product	0.599	0.623	0.827			
Learning Capability	0.668	0.725	0.516	0.852		
Management Capability	0.686	0.727	0.494	0.887	0.811	
Technological Capability	0.722	0.776	0.552	0.891	0.798	0.823

The loading factor value of business performance is the highest compared to other constructs. This is shown in table 2. The condition for a construct to be reliable is that its CR value is above 0.7 and AVE is above 0.50 [19]. All constructs in this study are reliable. This is shown in Table 3.

Table 3. Composite reliability and AVE Scores for each construct.

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance
Business Performance	0.877	0.877	0.925	0.804
Customer Orientation	0.863	0.865	0.906	0.707
Innovation Product	0.849	0.864	0.896	0.684
Learning Capability	0.873	0.875	0.913	0.725
Management Capability	0.828	0.849	0.884	0.657
Technological Capability	0.758	0.756	0.862	0.677

Structural Model

The next discussion is related to the structural model. The function of the Inner model is to determine the relationship between constructs, construct scores, and R-square. For business performance, the R -square value is 0.610. This shows that business performance is explained by technological capability, product innovation, management capability, and learning ability 61%. For product innovation, the R -square value is 0.4%. It shows that product innovation is explained by customer orientation, technology capability, and management capability 40%.

Hypothesis Test

Table 4. Summary of the Result for inner weights

	Original sample (O)	Mean (M)	Standard Deviation (STDEV)	T statistics O/STDEV	P Value
Customer Orientataion → Innovation Product	0.489	0.488	0.125	3.898	0.000
Innovation Product → Business Performance	0.267	0.263	0.092	2.902	0.004
Learning Capability → Business Performance	-0.235	-0.238	0.202	1.162	0.246
Management Capability → Business Performance	0.378	0.376	0.136	2.775	0.006
Management Capability → Innovation Product	0.004	0.005	0.133	0.028	0.977
Technological Capability → Business Performance	0.482	0.490	0.161	2.994	0.003
Technological Capability → Innovation Product	0.169	-.177	0.139	1.217	0.224

To see if a hypothesis proposed by the author is accepted or rejected, using significance or p-value. Hypotheses H1, H5, and H6 are accepted. And the rest are rejected. Hypothesis H1 was accepted with a significance level of <0.05 and $t_{count} 3.898 > 1.96$. Hypothesis H5 was accepted with a significance level of <0.05 and $t_{count} 2.902 > 1.96$. Hypothesis H6 was accepted with a significance level of < 0.05 and a t-count of $2,994 > 1.96$. In conclusion, customer orientation has an effect on product innovation. Product innovation and technological capabilities impact performance.

Discussion

Lombok Island is not only developing as a tourist area, it is also a center for various export-oriented handicrafts, one of which is the "Cukli" craft. This industry is a wood carving craft combined with seashells attached to the carving. This product has a unique, aesthetic value and high selling value so it is in demand by local and international tourists. Analysis of the effect of customer orientation, management ability, technological ability, learning ability, and product innovation on performance is the purpose of this study. It is intended to make strategies that are more appropriate than before to improve organizational performance. The three accepted hypotheses are explained one by one. Hypothesis H1 is accepted, meaning that customer orientation has an effect on product innovation.

This shows that one of the SME strategies to increase product innovation is customer orientation. The activities that SMEs need if they are customer-oriented refer to the results of this study such as paying greater attention to customers, a strong commitment from company employees to satisfy their customers, companies are always trying to gather information about customer desires, and gather information about how to satisfy their customers. Study results from Aydin [4] & Sukartini, *et al.*, [9] support this finding.

Hypothesis H5 is accepted, meaning that product innovation has an effect on organizational performance. This illustrates that the strategy of SMEs to improve organizational performance is for the better with product innovation. Its activities include: the company always creates products according to the wishes of consumers from its target market, produces products that are different from its competitors, the products produced do not leave the uniqueness of the product itself and always create new products for the target market. Study results from Ismail *et al.*, [8] and Christa & Vivy [16] support this finding.

Hypothesis H6 is accepted, meaning that technological capabilities affect business performance. These results provide an indication for companies to develop strategies to improve organizational performance, by increasing technological capabilities. This ability is mainly related to the company's ability to solve problems faced by implementing new technology, the ability to predict technological changes that occur, skills in using new technology, and being a leader in improving technology standards. The results of studies from Salisu & Lily [2] and Otisio *et al.* [13] support this finding.

V. CONCLUSIONS AND RECOMMENDATIONS

Referring to the results and discussion above, theoretical and managerial implications can be obtained. The theoretical implication is to strengthen the existing theoretical concepts and empirical data to support the research that has been done by

previous researchers. This includes an in-depth study of the determinants of performance. While the managerial implications of this research are expected to be useful for management in achieving better performance in order to continue to exist in an industry given the increasingly competitive level of competition.

Regarding customer orientation, SMEs need to shape organizational behavior that leads to a culture of customer satisfaction orientation. Therefore, SMEs need to always improve their competence and skills, especially employees through participation in education and training that is often carried out by government agencies and related agencies. Currently, the color of "Cukli" has changed, from black to brown according to the needs and desires of the target market.

In terms of product innovation, companies need to improve their skills in producing product innovations. This can be done by (a) trying new ideas, (b) finding new ways, (c) being innovative, (d) increasing the rate of introduction of new products, (e) marketing new products, (f) able to carry out continuous learning, (g) able to transform knowledge, and (h) able to be more creative. For example, for this craft, it is necessary to diversify products such as making products with various color variations, several types of sizes for one type of product, or other features.

For technology capabilities, SMEs need to forge strategic alliances, for example with the government for new technologies and train employees on how to use them. The goal is to produce products that are of value to customers.

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