CREATING PRODUCT INNOVATION IN MICRO CREATIVE INDUSTRY IN INDONESIA

Rd. Much. Jusup Nurgraaha, Widyatama University
Hari Mulyadi, Universitas Pendidikan Indonesia

ABSTRACT

This study aims to analyse the factors that affect the level of creativity and innovation of creative industries in the development of entrepreneurship in Indonesia, especially micro-creative industries. This study is based on the phenomenon of the deterioration of the performance of the micro-creative industry in Indonesia. Factors suspected to influence on the research is the ability to analyse customer desire from co-creation experience, development of creativity and innovation ability in product innovation, this research method using interview technique to owner of micro creative industry umbrella painting, bamboo and woven mendong in area Tasikmalaya Indonesia as many as 156 owners have been collected and then analysed by using SPSS, SEM (AMOS) model, the results show two independent variables partially influence the innovation of micro-creative industry products in Indonesia, implying that to create innovation of new products that have added value must be based on the collaboration between customers through their experience with the enhancement of creativity and innovation capability in the internal micro-creative industries of Indonesia.

Keywords: Co-Creation Experience, Development of Creativity and Innovation Ability, Product Innovation.

INTRODUCTION

In order to improve the performance of SMEs in facing increasingly stringent challenges, industrial entrepreneurs in the SMEs sector are encouraged to improve the ability of creativity and innovation in analysing what consumers want and the experience felt after getting a product that has been purchased called co-creation experience is expected can create an innovation product according to consumer expectations. The creative industries of micro umbrella painting, bamboo and wicker webbing in Tasikmalaya city of West Java based on field survey have not been able to identify and fill the existing market gap with reliable products that are difficult to duplicate by competitors, still focus on maintaining existing customers meaning not yet dare to creativity and innovate in creating the added value of a product to meet customer desires.

An entrepreneur engaged in the micro-creative industry must be able to creativity and innovate, by always displaying product innovation so as to attract customers and needs that have added value as customer wishes on creative micro industries umbrella painting, woven bamboo and wicker mendong in the city of Tasikmalaya West Java based field surveys have not been able to identify and meet existing market gaps with products that are reliable and hard to duplicate by other industry entrepreneurs, thus able to provide competitiveness to marketed products and not only focus on maintaining existing customers but attracting new customers due
to the courage to do creativity and innovation in creating added value of a product to meet customer desires.

Research conducted (Voyer & Kastanakis, 2016) solutions for creativity, innovation and involvement can be found in the concept of co-creation. Co-creation will increase the value for humans in economic experience. Katrien (2015), co-creation is expected to determine the importance of the degree of readiness, technologization and connectivity between the role of the customer and the company's experience. Co-creation experience (CCE) is the quality of experience consumers experience when engaging in creative activities that encourage them to continue and motivate them to do their best (Csikszentmihalyi, Abuhamdeh & Nakamura, 2005). According to Prahalad & Ramaswamy (2004), the significant increase of opportunity for value creation for the company as a source of unique value is the concept of co-creation experience.

The concept of co-creation experience (CCE) focuses on the idea of the customer as a value creator in a product innovation, (PI) interacting with the organization (Nina et al., 2013).

Some research done by Sarah & Jönköping (2010), by creating value together as a basis to create value of customer satisfaction such as, functional, social and emotional (Kim & Park, 2016), customer experience has important meaning in creating the value of a product or service (Javier et al., 2004). To create Product Innovation (PI) is not only based on co-creation experience but must be balanced with Development of Creativity and Innovation Ability (DCI). The competitive advantage tomorrow will be different from today; the real focus for the company is the chance to compete for the future (Hamel & Prahaland, 1991). Innovation is an important element in the company by creating new business activity, in generating growth and ensuring the viability of existing businesses to gain competitive advantage. However, the point is that innovation driven by creative individuals does not occur spontaneously (Lowe & Mariott, 2006). According to Ünay & Zehir (2012) in his research in the fashion business, which says that concerning Product Innovation is related to the creativity of fashion designers/textiles essential to creating a stronger and world-leading international brand, competitive products and innovation in “business operations”?

Providing quality experience to customers has become one of the key elements of a successful marketing strategy (Prebensen et al., 2014). According to Masaru & Kazuhiko (2009) products always provide functional benefits, such as the performance and functionality of the product. The function of the product is one reason to get customer satisfaction. In addition, adequate product performance and product functionality are recognized as differentiated products in the market and also generate market competitiveness. Hassan (2017) classification of new products is very important when testing customer adoption behaviour. The reason is that this type of innovation affects the level of customer or community adoption and the kind of knowledge learned for new goods and services.

Based on previous research descriptions that have been proposed, this study aims to develop a product innovation for industrial craftsmen and to develop creative innovations for entrepreneurs owners of the industry so as to increase buyer's interest in marketed products and have creative products that are competitive and have value added to the increase of industrial product sales for entrepreneurs in Tasikmalaya city. So the concept of this research combines co-creation experience and development of creativity and innovation ability in the achievement of innovation product in the creative industry.
LITERATURE REVIEW

Relations Experience Co-Creation and Development of Creativity and Innovation Ability

Co-creation experience is the quality of experience that consumers experience when engaged in creative activities that encourage them to continue and motivate them to do their best (Csikszentmihalyi, Abuhamdeh & Nakamura, 2002). Co-creation experience by 2013 and Minkiewicz, Evans & Bridson (2013) is the creation of shared value between the company and the customer through interaction with addressing the special needs of the privileged customer. In analysing the desires of customers the company must be able to improve the ability to creativity and innovate in the company, as expressed by Anja & Peter (2005), companies that meet customer requirements will be lucky because customers are now more demanding, more aggressive, more impatient and smarter than before and worse yet they have a wider range of products and services than they ever chose.

Research conducted by Kyung-Hee & Duk-Byeong (2016) three fundamental dimensions of the value of satisfaction felt by the tourists, namely functional value, social value and emotional value and with the results of his research that functional value, social value and emotional value proved to have a significant effect on the value of customer satisfaction. Prahalad & Ramaswamy (2004) as a shift in value to the experience, the marketplace becomes a forum for communication and interaction between consumers, the consumer community and the company's dialogue, access, transparency and understanding of risk-benefits essential to subsequent practice in value creation. While Anja & Peter (2005), companies that meet the requirements of their customers will be lucky, customers are now more demanding, more aggressive, more impatient and ingenious than ever and worse yet have a range of products and services that are wider than they ever chose.

H1: Relationship of co-creation experience and development of creativity and innovation ability.

Relationship Co-Creation Experience and Product Innovation

Empirical research is related to the experience of co-creation (Nambisan & Nambisan, 2008) and creative experience during the competition of ideas and design in particular. More insight is needed because the company's investment in the co-creation and virtual design creation platform is very important. They bear the risk of generating little interest in participation and consequently not improving the innovation process through valuable contributions while (Johann et al., 2011) contributes to a better theoretical understanding of the autonomous, entertaining and competent participants' participant experience. From a managerial perspective, he provides guidance in designing successful ideas and design competitions. While innovative managers may be interested in creative contributions, for participants, this is an important experience. Featured community platforms and no single article submission sites are needed to attract creative users to convey their ideas and designs.

Research conducted by Hassan (2017) product innovation is defined as goods, services, ideas or processes perceived by the customer as a new thing in life. Cheng-Feng et al. (2013) novelty Product innovation is needed to identify the path to product innovation success. According to Cui & Wu (2015) three forms of customer engagement in product innovation, customer engagement as a source of information (CIS), customer engagement as co-developers...
(CIC) and customer engagement as innovators (CIN). According to Cindy (2014), when a company builds a customer-based product or service it means solving a specific problem that the customer is facing.

\[ H_2: \text{Relationship Co-Creation Experience and Product Innovation.} \]

**Relationship between Creativity and Innovation Ability Product Innovation**

Product development often requires the interaction of a group of people representing different roles within the organization. Therefore, it is important to regulate organizational creativity, which refers to "the creation of new products, services, ideas, procedures or processes that are valuable and useful by individuals working together in complex social systems" (Woodman, Sawyer & Griffin, 1993). Creativity as the ability to think of schemes, reach new and functional conclusions, suitable for solving problems or seizing opportunities. Research conducted by Cheng et al. (2013) innovation related products related to the organization, related to the project, related to processing, related products and related markets and new product innovations. If an organization utilizes an existing product line to innovate, the company's novelty level is low. Conversely, if an organization explores the idea of a largely new product for the company, the level of novelty in the company's product line is high. Together with technology, markets and novelty, the dimensions of the firm's product dimensions determine the magnitude of product innovation. The novelty of an innovation can affect the product innovation.

\[ H_3: \text{Relationship between Creativity and Innovation Ability Product Innovation.} \]

**RESEARCH METHOD**

This study used survey approach using 156 respondents to the owner of creative microcomputer industry umbrella, bamboo woven and mendong ayaman located in Tasikmalaya area of West Java Indonesia in the development of community entrepreneurship. The sampling technique used in this research is nonprobability sampling. According to Sekaran & Roger (2014), nonprobability sampling is: Design of sampling in which elements in the population has no known or predetermined opportunities to be selected as a subject of the sample.

Data analysis in this research using SPSS and structural equation (SEM) assisted by AMOS program. Analyses of this study include, confirmatory factor analysis (CFA) of the measurement model used to validate the factorial structure with the modifications and adjustments required to thoroughly examine the measurement model and ensure the quality of the assessment measurement model, fit model, composite reliability (CR), convergent validity and discriminant construct values.

**Research Empirical Model and Hypothesis**

From the above explanation, some research has been done indicate that in forming product innovation required role from a customer, because a customer can become an innovator in value creation on a product. Research model in this research based on literature and hypothesis study, conceptual model or theoretical framework can be seen in Figure 1.
FIGURE 1
RESEARCH EMPIRICAL MODEL

Validity Test

For validation test analysis used SPSS as in Table 1. According to Chen & Pearl (2015), validity test is used to measure whether the questionnaire is valid or not. Questionnaires are said to be valid if able to express something that will be measured by a questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>eec1</th>
<th>eec2</th>
<th>eec3</th>
<th>eec4</th>
<th>CCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>eec1</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.545**</td>
<td>0.550**</td>
<td>0.480**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>eec2</td>
<td>Pearson Correlation</td>
<td>0.545**</td>
<td>1</td>
<td>0.562**</td>
<td>0.643**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>eec3</td>
<td>Pearson Correlation</td>
<td>0.550**</td>
<td>0.562**</td>
<td>1</td>
<td>0.520**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>eec4</td>
<td>Pearson Correlation</td>
<td>0.480**</td>
<td>0.643**</td>
<td>0.520**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>CCE</td>
<td>Pearson Correlation</td>
<td>0.785**</td>
<td>0.846**</td>
<td>0.813**</td>
<td>0.812**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)

Normality test

According to Ghozali (2013), normality test aims to test whether the variable regression model of a bully or residual has a normal distribution. Normality tests are required to perform
other assay variables assuming that the residual values follow the normal distribution. If this assumption is violated then the statistical test becomes invalid and the parametric statistics cannot be used. The test results of normality test on variable said normal distribution when cr<±2.58 (α=0.001), in Table 2 seen statistic skewness and kurtosis all variable manifest (indicator) have value less than 2.058 and multivariate test result cr=0.615<2.58, then the multivariate variable of the study is normally distributed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>min</th>
<th>max</th>
<th>skew</th>
<th>cr</th>
<th>kurtosis</th>
<th>cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>pi3</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.367</td>
<td>-1.953</td>
<td>-1.314</td>
<td>-3.497</td>
</tr>
<tr>
<td>pi2</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.116</td>
<td>-0.615</td>
<td>-1.422</td>
<td>-3.785</td>
</tr>
<tr>
<td>pi1</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.442</td>
<td>-2.352</td>
<td>-0.953</td>
<td>-2.537</td>
</tr>
<tr>
<td>dcia1</td>
<td>1.000</td>
<td>5.000</td>
<td>0.024</td>
<td>0.129</td>
<td>-1.352</td>
<td>-3.598</td>
</tr>
<tr>
<td>dcia2</td>
<td>1.000</td>
<td>5.000</td>
<td>0.199</td>
<td>1.061</td>
<td>-1.398</td>
<td>-3.721</td>
</tr>
<tr>
<td>dcia3</td>
<td>1.000</td>
<td>5.000</td>
<td>0.135</td>
<td>0.721</td>
<td>-1.361</td>
<td>-3.622</td>
</tr>
<tr>
<td>eec4</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.112</td>
<td>-0.596</td>
<td>-1.253</td>
<td>-3.335</td>
</tr>
<tr>
<td>eec3</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.100</td>
<td>-0.532</td>
<td>-1.335</td>
<td>-3.552</td>
</tr>
<tr>
<td>eec2</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.239</td>
<td>-1.272</td>
<td>-1.251</td>
<td>-3.328</td>
</tr>
<tr>
<td>eec1</td>
<td>1.000</td>
<td>5.000</td>
<td>-0.298</td>
<td>-1.588</td>
<td>-1.112</td>
<td>-2.960</td>
</tr>
<tr>
<td>Multivariate</td>
<td></td>
<td></td>
<td></td>
<td>1.462</td>
<td>0.615</td>
<td></td>
</tr>
</tbody>
</table>

Multicollinearity Test

Multicollinearity test is used to know whether or not the deviation of classical assumption of multicollinearity is the existence of the linear relationship between independent variables in the regression model. Multicollinearity or Singularity in a combination of variables, it is necessary to observe the determinant of its covariance matrix or singularity. The determinant of Sample Covariance Matrix=250977>0, so it can be concluded that the presence of Multicollinearity or Singularity in this data can still be tolerated. Therefore these assumptions are fulfilled (Table 3).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Development of Creativity and Innovation Ability</th>
<th>Co-Creation Experience</th>
<th>Product Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of Creativity</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and Innovation Ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Creation Experience</td>
<td>0.161</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Product Innovation</td>
<td>0.222</td>
<td>0.271</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Measurement Model

The validity of the construct of the research instrument is estimated by evaluating the suitability of individual and overall models. Assessment is done using Amos 20.0. The results of the examination indicate a number of invalid indicators of each variable causing the unreliable initial model. The revised model, done by excluding the invalid items from each of these variables is then done. The revised results suggest a revised model match, indicating that the
The model is valid and reliable thus providing revised acceptance of the model for use in this study (Figure 2).

FIGURE 2
STRUCTURE MODEL

Model Testing (Goodness-of-Fit)

Assessment of SEM model that is formed seen from the goodness of fit size is presented in Table 4.

<table>
<thead>
<tr>
<th>Statistics Test</th>
<th>Critical Value</th>
<th>Estimate</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cmin/DF</td>
<td>≤ 2.00</td>
<td>39.064</td>
<td>Good Fit</td>
</tr>
<tr>
<td>P-value</td>
<td>≥ 0.05</td>
<td>0.182</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit (AGFI)</td>
<td>≥ 0.90</td>
<td>0.925</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>≥ 0.90</td>
<td>0.956</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>≥ 0.90</td>
<td>0.987</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Tucker Lewis Index (TLI)</td>
<td>≥ 0.90</td>
<td>0.981</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>≤ 0.08</td>
<td>0.036</td>
<td>Good Fit</td>
</tr>
</tbody>
</table>

The result of evaluation of SEM model by looking goodness of fit in Table 4 shows model seen from chi-square value fulfil model suitability (chi-square value 39.064 smaller than table value) with the significance level (0.182) greater than 0.05. The research model has AGFI, GFI, CFI, TLI and RMSEA values indicating a good level of conformity. This indicates that the
model proposed in this study is acceptable because it has a goodness of fit measure that indicates an acceptable model.

Hypothesis Testing Research

After the model evaluation results can be expressed that the model meets the criteria of a suitable model (FIT) further testing the research hypothesis based on the value of t each causality relationship of the SEM processing results as in Table 5.

<table>
<thead>
<tr>
<th>H</th>
<th>Hypothesis</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>p-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>Co-Creation experience terhadap Development of Creativity and Innovation Ability</td>
<td>0.142</td>
<td>0.087</td>
<td>1.646</td>
<td>0.100</td>
<td>Sign</td>
</tr>
<tr>
<td>H₂</td>
<td>Co-Creation experience and Product Innovation</td>
<td>0.284</td>
<td>0.114</td>
<td>2.489</td>
<td>0.013</td>
<td>Sign</td>
</tr>
<tr>
<td>H₃</td>
<td>Development of Creativity and Innovation Ability to Product Innovation</td>
<td>0.176</td>
<td>0.090</td>
<td>1.953</td>
<td>0.051</td>
<td>Sign</td>
</tr>
</tbody>
</table>

DISCUSSION

Relationship Co-Creation Experience and Development of Creativity and Innovation Ability

Based on the test results using SEM it appears that co-creation experience has a positive effect on the Development of Creativity and Innovation Ability with the test result value of 0.161. that the Co-Creation Experience is a shared value creation between the company and the customer that influences the Development of Creativity and Innovation Ability in the micro creative industry in Tasikmalaya City. This research is relevant to the research conducted by Kim & Park (2016) three fundamental dimensions of the value of satisfaction felt by the tourists, namely functional value, social value and emotional value and with the results of his research that functional value, social value and emotional value proved to have a significant effect on the value of customer satisfaction. Prahalad & Ramaswamy (2004) as a shift in value to the experience, the marketplace becomes a forum for communication and interaction between consumers, the consumer community and the company's dialogue, access, transparency and understanding of risk-benefits essential to subsequent practice in value creation.

Relationship Co-Creation Experience and Product Innovation

Based on the results of testing using SEM it appears that co-creation experience has a positive effect on Product Innovation with a test result value of 0.271. That Co-Creation Experience is the creation of added value in a product that is expected from consumers that influence the creation of Product Innovation in a micro creative industry in Tasikmalaya City.

The results of this study are relevant to research conducted by Hassan (2017) product innovation is defined as goods, services, ideas or processes perceived by the customer as a new thing in life. Cheng et al. (2013) novelty Product innovation is needed to identify the path to
product innovation success. According to Cui & Wu (2015) three forms of customer engagement in product innovation, customer engagement as a source of information (CIS), customer engagement as co-developers (CIC) and customer engagement as innovators (CIN). According to Cindy (2014), when a company builds a customer-based product or service it means solving a specific problem that the customer is facing.

Development of Creativity and Innovation Ability to Product Innovation

Based on the results of testing using SEM it appears that the Development of Creativity and Innovation Ability has a positive effect on Product Innovation with a value of test results of 0.222 that the Development of Creativity and Innovation Ability is the ability to creativity and innovation in creating added value in a product that is expected from the consumers that influence the creation of Product Innovation in a micro creative industry in Tasikmalaya City. The results of this study are relevant to Creativity as the ability to think of schemes, reach new and functional conclusions, suitable for solving problems or seizing opportunities. Research conducted by Cheng-Feng et al. (2013) innovation related products related to the organization, related to the project, related to processing, related products and related markets and new product innovations. If an organization utilizes an existing product line to innovate, the company's novelty level is low. Conversely, if an organization explores the idea of a largely new product for the company, the level of novelty in the company's product line is high. Together with technology, markets and novelty, the dimensions of the firm's product dimensions determine the magnitude of product innovation. The novelty of an innovation can affect the product innovation.

CONCLUSION

SEM model test results using AMOS can be concluded that there is a positive influence between Co-Creation Experience with Development of Creativity and Innovation Ability. This indicates the increasing Co-Creation Experience will be able to increase the Development of Creativity and Innovation Ability. While the Co-Creation Experience and Development of Creativity and Innovation Ability variables have a positive influence on Product innovation, this means that increasing Co-Creation Experience and Development of Creativity and Innovation Ability will influence Product Innovation improvement. Implications obtained based on the results of this study stated that the creation of the innovation products creative microcomputer umbrella painting, woven bamboo and wicker mendong in the city of Tasikmalaya West Java need to pay attention to customer desires based on experience and balanced with the improvement of creativity and innovation in the internal company. Entrepreneurs in micro industries are required to be able to innovate products in order to increase buyer interest and competitiveness because consumers basically want something new in the marketed products.

REFERENCES


Prebensen. (2014). Creating experience value in tourism. CABI is a trading name of CAB International.


