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Sustainable Development Innovation: “Increasing SME’S in Aspects Product Concept Development”

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Abstract
One of the basic considerations for the establishment of a Creative Industry in Indonesia is the availability of innovative products that can be marketed sustainably, but we still find that not all Small and Medium Enterprises (SMEs) in Indonesia are aware of this. This occur because there is no clear product concept development innovation model that can be used as a reference by SMEs in Indonesia. The main objective of this research is to produce a product innovation model for SMEs in the handicraft sector. This model contains a continuous innovation model that will make product concept development achievable. The sample of this research are 55 SMEs in the potential craft sector in the Serang, South Tangerang, Tangerang City, and Cilegon areas. The research data were collected through interviews, FGDs, and questionnaires. The data was collected, analyzed and made a models of SME product innovation which can be implemented in the handicraft sector SMEs in Banten Province. The model from this research is expected to be an efficient framework that is useful for assisting SMEs in the handicraft sector during the current COVID-19 pandemic.

Keywords: Creative Industry, Product Concept, Innovative, Sustainable Development

Introduction
The importance of small and medium-sized enterprises (SMEs) in the national economy means that they must continue to innovate and expand their businesses in order to avoid being eroded by the current of liberalization. SMEs must be able to take every opportunity by absorbing the development of consumer expectations for a product. Currently, what modern society expects in choosing a product is that people prefer environmentally friendly products, this is in line with the growing public awareness of environmental sustainability which is currently very badly damaged (Aqmala, 2013). SMEs here are trading businesses managed by business entities or individuals referring to productive economic businesses in accordance with the criteria set out by Law Number 20 of 2008 (Rizal et al., 2020)

Innovation is the first dimension of entrepreneurial orientation. Innovation refers to the tendency of new ideas, novelty, experimentation, and creative processes that result in new
technological processes, services, and products. Therefore, innovation is similar to a climate, culture or orientation not results. According to Kahn (2018); Irani (2019), innovation occurs along a continuum, for example from trying out a new product line or experimenting with a new product, trying to master a new technology.

Innovation refers to the tendency of new ideas, novelty, experimentation, and creative processes that result in new technological processes, services, and products. Therefore, innovation is similar to a climate, culture or orientation not results. According to Kahn (2018); Irani (2019), innovation occurs along a continuum, for example from trying out a new product line or experimenting with a new product, trying to master a new technology. Edwards-Schachter (2018) argues that some companies benefit more from imitation than innovation. Edwards-Schachter (2018) further suggests that innovation will lead to a trap, because spending on new product development can be a waste of resources if these efforts do not pay off. In his writings, Florén, et al (2018); Lee & Triml (2018); Chen et al (2018) succeeded in showing that innovation has a positive effect on the performance of new product development in a company. Innovation must take into account the uniqueness of a product, thereby enabling the creation of a product that is different from its rival alternatives that are valued by customers in order to improve the performance of SMEs. One of the efforts that SMEs can do in product innovation is through the creation of environmentally friendly products. For example, making environmentally friendly plastic bags that can be destroyed by themselves so they don’t pollute the environment. Apart from the product side, innovation can be done in terms of the technology used, such as using environmentally friendly equipment during the production process, and so on.

According to Afuah (2020) and also Hodges & Link (2019), an entrepreneur and a business that is still in the startup stage will be an important part of the emergence of innovation, not only in terms of the products and services provided, but also in terms of the technology and processes they provide. Entrepreneurs can demonstrate their ability to create the essence of creativity and innovation. An entrepreneur applies new and creative ideas to introduce innovation in a product or service to obtain product results more efficiently through innovative channels. Innovation in new product development can improve existing products or develop completely new concepts to create original and innovative products (Godin, 2017; Kahn, 2018; ).

It is mentioned that creativity is not only needed in terms of developing new products or services, but is also needed by every type of organization. Creativity is seen as something that goes beyond new products, new services and new better processes (Cheng & Yang, 2019). Therefore, if someone can organize better or write a report in a new or more effective way, all of this can be called a creative act (Firmansyah, 2019).

Education about product innovation in certain sector SME products is also very important in order to provide added value to these products so that they can increase income. Product innovation can be interpreted as an effort made by product makers to improve, improve, and develop the products they produce (Fakhriyyah et al., 2020). Han et al. in Curatman et al (2016) stated that the main purpose of product innovation is to meet market demand so that product innovation is one that can be used as a competitive advantage for the company. As time goes by and with the current state of the covid-19 pandemic, it is not wrong if one of the main considerations in establishing a Creative Industry in Indonesia is the existence of a product concept that is full of creativity and innovation as well as sustainable; but the problem is that not all Small and Medium Enterprises (SMEs) in Indonesia
have and think about this. This happens because there is no innovation model for product concept development that can really be used as a guide for SMEs in Indonesia.

From the explanation above, the main objective of this research is to produce a Sustainable Development Innovation model, especially in the field of developing innovative product concepts or models for Small and Medium Enterprises (SMEs) in the Serang, South Tangerang, Tangerang City, and Cilegon areas. This model contains a sustainable innovation design that will make the development of innovative product concepts in the handicraft sector SMEs in the 4 research areas can be fulfilled properly.

Literature Review

Small and Medium Enterprises (SMEs)

SMEs mostly compete based on a narrow focus and specialization, unlike most large companies. This relates not only to products, markets, and but also to prices, costs, and manufacturing capabilities (Berends et al., 2014). Quality of design and manufacturing, speed of delivery and reliability, and flexibility and response to client demands account for a large portion of the value of SMEs (Cagliano et al., 2001). SMEs are known for their simple organizational structure with multiple layers of management (Smith & Smith, 2007), enabling closer interaction of employees and innovative responsiveness to competitors' moves so that they are flexible in responding to changes in the general business environment (Papazov & Mihaylova, 2016). Hudson Smith & Smith (2007) agree with this viewpoint and point out that small and medium-sized enterprises (SMEs) must respond and adapt to market developments since they are usually unable to influence the market.

Usually, smaller organizations (SMEs), have various advantages such as agility, quick decision making, sharing a clear vision, informal culture, flexibility, etc. Arbussa et al., 2017. All of this can help them become more innovative. Innovation is important for all companies because it affects their size, capacity and performance. According to Salavou et al., SMEs that are learning-oriented facing strong competition have a tendency to be more innovative and resilient in the market (Ristovska, 2015).

Innovative and personable entrepreneur/manager plays a key role in SME innovation adoption. On the other hand, we also have external factors such as globalization. In today's global economic market, SMEs will not only compete with traditional rivals but they will also face competition from global rivals. As stated by Gunasekaran et al., to remain competitive, SMEs need to rethink their operating strategies, be ready to accept and adopt changes and use them to their advantage against their competitors (Gunasekaran et al., 2011).

Product Innovation

The competitiveness of SMEs is reflected in product competitiveness and organizational competitiveness. The main indicators of product competitiveness are product value/price and customer satisfaction, while the main indicators of organizational competitiveness are profit and human resources (HR). High innovation, both process innovation and product innovation, will increase the ability of SMEs to create higher quality products. High product quality will increase competitive advantage in SMEs which in turn has an impact on the performance of SMEs themselves (Elfahmi dan Jatmika, 2019).

An industry is said to be competitive if it has the same level of total factor productivity (TFP) as or higher than its foreign competitors. Innovation remains a demand and is very important with various innovations, both starting from the product and from the process and it can be seen how big
the contribution of the innovation effort is to the revenue and process, especially innovation that must be directed at the SME aspect itself, but must be addressed as well at a low cost, so that innovation must be focused on product efficiency and differentiation, including in terms of feasibility and better quality. (Elfahmi dan Jatmika, 2019).

Research Methods
Types of Research
This study uses a qualitative descriptive method, which describes the nature of something that is ongoing at the time of the research and examines the causes of a particular symptom.

Population Identification and Research Samples
This study uses the population of the handicraft sector in 4 locations in the city of Banten. Sampling of SMEs in the handicraft sector in these 4 cities was carried out using a purposive sampling technique, namely: based on certain considerations which were estimated to represent the population. The selected sample is creative industry SMEs that have a business capital of Rp. 50 million – Rp. 500 million, and MSMEs that earn between 20 million -50 million. Based on these criteria, craftsmen who represent each region will be selected with one potential craftsman, namely the cities of Tangerang, South Tangerang, Serang, and Cilegon.

Data Collection
Data collection, including literature study, direct observation (observation), interviews, secondary data from other sources, or a combination thereof. As for the development of the model and its application design, it is guided by existing theories from previous research, interviewing resource persons for SME owners and managers, and secondary data, including conducting Focus Group Discussions (FGD) with related parties.

Data Analysis
This study uses qualitative and quantitative analysis. The results of observations and documentation studies were analyzed quantitatively to get an overview of the current conditions of the handicraft sector SMEs in the 4 research areas. The next analysis is qualitative in nature referring to the sustainable development aspect based on previous studies and through a process of applied activities that focus on product concept development including product function development, product models development, and the development of product competitiveness against other similar products. This process will produce a product concept development model for the handicraft sector SMEs.

Results and Discussion
This research was conducted in 4 cities in the province of Banten. Covering the city of Serang, Cilegon City, Tangerang City and South Tangerang city. Samples of creative products in the field of handicrafts between Others: Batik, shell crafts, banana fronds, bamboo, handicrafts, knitting bags, embroidery bags, water hyacinth leather. Crafts made from recycled and so on.

This study included 55 SMEs in the handicraft industry from four different areas as respondents or research participants. Each SME is represented by a respondent, with 32.7% men dan 67.3% women, and 10 sources (8 men; 2 women) that were interviewed for this study.
The results of the questionnaire from the respondents showed that around 95% of the respondents stated that the products produced by their SMEs are always updated every few months or at least once a year. From the results of the questionnaire, data can be taken that the innovation of new products produced has not been maximized, where 70% of respondents stated that product renewal is only in model and color modifications.

The results of the documentation and observation studies also showed that there is a lack of product innovation and the application of mature product concepts in the handicraft sector SMEs in the 4 research areas. In fact, some SMEs tend to ignore product innovation because there are almost no significant changes in the products produced from year to year. For example, in the development of a pottery product model in one of the handicraft SMEs in Serang; most of the shapes or pottery produced are exactly the same as they were 10 years ago and the models tend to be bulky and require a fair amount of space to store them.

The results of interviews with 10 craft sector SME owners-managers in Serang, South Tangerang, Tangerang, and Cilegon also get an update on the current condition of SMEs. During the current pandemic, almost 80% of the interviewees said that product function development, development product models, and the development of product competitiveness against other similar products is difficult, some because raw materials are difficult to obtain and expensive, some say that product innovation has been carried out but there is no change in sales and even most of the products resulting from innovation are not marketable due to the COVID-19 pandemic.

If this is the case, then it is necessary to have a clear mechanism or framework in developing the concept of product innovation to improve the sustainable development of existing handicraft SME’s.

Discussion

Analysis of the results of interviews with the leaders of several handicraft SMEs shows that their product innovations do not help much in increasing the sales of the products that SMEs produce. Overall, the results of the research have narrowed to the conclusion that the product innovations that have been carried out so far seem ineffective, inefficient, and spend a lot of money in vain; this is because the costs spent on product innovation sometimes cannot come back because there are no buyers, especially when the covid-19 pandemic hits Indonesia and the world. However, not all handicraft SMEs are affected by this condition, because there are some handicraft SMEs which actually flood orders during this pandemic, such as wood craft SMEs which have changed direction by producing coffins for victims of COVID-19;

With the results as described previously, we offer a new model in developing the concept of handicraft SME products in the province of Banten. This model is a modification and combination of several models or product concept innovation models from several theories and previous research. One of them is Product Innovation Performance (PIP).

PIP is the result of successful exploitation of new knowledge and sustainability Lille & Romero,(2017). This process consists of the technical design, research and development, manufacturing, management, and commercial activities that constitute the marketing of a new (or improved) product. Innovation involves two dimensions: technical and non-technical; however, many studies only address the former (Ngo & O’cass, 2013). Based on the relevant literature, we analyze both dimensions while considering certain configurations of non-technical innovations that stimulate sustainable PIP development Chang (2016)
Product innovation performance involves two dimensions: efficiency (PIP_EFFICI) and efficacy (PIP_EFFICA) (Alegre et al., 2006). Innovation efficiency reflects the effort spent to achieve a certain level of success, while innovation efficiency reflects the level of innovation success. The innovation process includes several stages from discovery to implementation which makes success dependent on the efforts of the company (Kyffin, S., & Gardien, 2009). This process plays an important role in the success of innovation (Gupta & Malhotra, 2013).

SMEs can achieve sustainable development through innovation if they maintain the innovation development process. Thus, our study offers a complete analysis of PIP based on different indicators from preparation to implementation of activities required for PIP development. Authors such as Curado et al. have shown that PIP_EFFICI has a positive effect on PIP_EFFICA Curado et al., 2018. Therefore, if we carry out a series of activities that are in the preparation, implementation and initiation of innovation, we can achieve PIP and, as a result, sustainable development.

Another framework model from Łobacz and Glodek (2015) which states that product concept development starts from seeking knowledge or knowledge about technology related to the products we produce and ends with a result, namely the emergence of new innovations in the products produced. This model assumes the entrepreneurial process perspective with the right product concept innovation will produce output that will determine the company's competitiveness (Łobacz and Glodek, 2015).

Based on the results of literature studies and previous studies, it can be seen that SMEs that have high creativity and product innovation will have the ability to achieve high business performance as well. Therefore, SMEs are expected to be able to generate creativity and product innovation in a sustainable manner so as to improve maximum business performance.

With a lot of literature that we get and data through interviews and questionnaires, we formulate a model that is integrated with parts of product development innovation that is sustainable development. An efficient framework from which innovative products emerge is highly expected to overcome the problems that exist during a pandemic like this.

The development of innovative products can be carried out in 3 stages of activities which can then be seen or measured the results or outputs at each stage that has been carried out. The first stage is to seek knowledge about technology related to innovative products to be produced. As a result of this process, SMEs will gain knowledge and knowledge about the latest technology. Furthermore, in stage two there is a process of finding how to utilize or exploit the science or knowledge about technology that has been obtained in the first stage in the framework of technical or non-technical innovation products. In the third stage, there is a process of applying knowledge or knowledge about technology that has been obtained to new products which will later produce innovative and sustainable products. Before the emergence of new sustainable products, it must first be measured, the efficacy and efficiency of the new product. This is the end result of an efficient framework that will help produce innovative products where these products will enhance the sustainable development of the SMEs concerned. The following is a product innovation development model that we propose from this research.
Conclusion

The product concept development model in this study can be used in determining sustainable innovation through the application of knowledge and technology, exploiting science or knowledge about technology in the framework of technical or non-technical innovation products so that they can help SMEs in the craft sector to produce goods that are really needed, market and consumer demand. This is important so that SMEs in the craft sector can survive the current COVID-19 pandemic. By always measure product efficiency and efficiency, it is hoped that the resulting product will never disappoint both SMEs as producers and product buyers as consumers. The development of innovative products is the main thing that must be fulfilled by all SMEs, not only the handicraft sector but also SMEs from other sectors. With the product innovation model in this study, it is hoped that the handicraft sector SMEs can survive during the COVID-19 pandemic, and grow even better in the future.

References


