The Analysis of Supply Chain Management Implementation for the Creative Industry in Bandung

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Abstract. The level of efficiency in creative industry remains low, leaving most of the creative industry sub-sector vulnerable to business continuity if changes and improvements in the aspect of production inputs are not made. Supply chain management is one of the sciences that can help overcome inefficiency. The concept of supply chain management can help small and medium-sized businesses achieve the desired levels of production efficiency. This research aims to understand the supply chain management model in ten creative industry players in Bandung through the assessment rubric analysis method. The assessment rubric used in this study was analytic scoring carried out by scoring the dimensions of supply chain management that have been assigned to ten creative industry players in the city of Bandung. In this study, there were 3 dimensions of supply chain management used, namely strategic supplier partnership, customer relationship, and information sharing. According to the research findings, the strategic supplier partnership dimension was the least noticed, while the customer relationship dimension was the most valued by the creative industries in Bandung.

Keywords: creative industry · supply chain management · strategic supplier partnership · customer relationship · information sharing

1   Introduction

According to the Indonesian Ministry of Trade, the creative industry is an industry that originates from the utilization of individual activities, skills, and talents to create prosperity and employment opportunities by generating and exploiting the individual's creative and creative power. The creative industry in Indonesia is developing very quickly and has even become a source of income for most Indonesians. The Indonesian Agency for the Creative Economy (BEKRAF) believes that the creative economy has become one of great potential to contribute to the economy of the Indonesian people. The contribution of the creative economy has continued to increase since 2010 where the creative economy currently contributes Rp525.56 trillion to GDP, until 2016 the contribution of the creative economy to Rp922.59 trillion or 7.44% of the national GDP [1]. This number is a very competitive result in terms of the contribution of the creative economy to GDP compared to other countries.

Based on research conducted by Ishak and Somadi [2], it was explained that most of the creative industry sub-sector in Bandung had a low level of efficiency so it was categorized as vulnerable to business continuity if changes and improvements were not made in aspects of production inputs. The efficiency level in this study was determined using DEA (Data Envelopment Analysis). This measurement is expressed by the ratio of output/input where assets and labor as the input variables and turnover as the output variable. The efficiency of each creative industry through input and output variables is said to be efficient if the original value or actual value is equal to the projected value or target value.

According to Purwatmini [3], it is very important for the creative industry to pay attention to efficiency, especially the efficiency of raw material costs and production costs. Efficient conditions allow the creative industry to produce products at competitive prices, considering that creative industry products must be able to penetrate the market, especially the global market with a high level of competition. One of the competitive strengths of a product is the low-price level that can be achieved through production efficiency. Purwatmini [3] also stated that the concept of supply chain management in the form of business partnerships makes it easy for small and medium-sized industries to achieve the desired production efficiency conditions.

Widyarto [4] explained that supply chain management is a set of approaches to streamline integration between suppliers, manufacturers, warehouses, and storage so that goods are produced and distributed in the right quantities, locations, and times to minimize costs and provide accurate service to customers. In addition, the implementation of supply chain management will contribute to reducing inventory costs which include storage, ordering, and stockout costs, and can reduce quality costs caused by product defects or process defects.

Stevenson and Choung [5] stated that supply chain management (SCM) is seen as the strategic coordination of business functions within a business organization and along its supply chain with the aim of integrating supply and demand management. Moreover, Dajorat and Yunitasari [6] explained that SCM is the incorporation of a process in which several entities work together to obtain raw materials, converting raw materials into semi-finished products or finished products which are then sent to retailers or directly to consumers. Therefore, apart from being a unit of supplier, manufacturing, customer, and delivery process, SCM is also a system in which an organization sends its production goods and services to consumers.

Suharto and Devie [7] analyzed how companies implement a supply chain management model with their business partners. Supply chain management is a method to achieve a more efficient integration of various organizations such as suppliers, manufacturers, distributors, retailers, and customers. Variable supply chain management is divided into three main aspects, namely strategic supplier partnership, customer relationship, and information sharing. A strategic supplier partnership is a long-term partnership between companies and suppliers to develop strategies and operational capabilities together to participate in organizations that aim to meet common goals [7]. Customer relationship describes a set of practices aimed at controlling customer complaints, developing long-term relationships with customers, and increasing customer satisfaction [7].

Then, information sharing tells the extent to which the company communicates important information to business partners [7].

According to Heizer, Render, and Munson [8], SCM is an activity in managing various activities to produce raw materials into semi-finished goods and finished goods, and then sending these products to consumers through the distribution system. Every business, both in large industries and SMEs, needs supply chain management to meet the availability of their products so that all consumers can be served well.

Therefore, this study aims to analyze the extent to which creative industry actors apply the supply chain management model based on predetermined dimensions. Business actors in the fashion, culinary, and craft sub-sectors in Bandung are designated as objects of this research considering that these three sub-sectors dominate the contribution to the creative economy in West Java, especially in Bandung.

2   Research Method

The type of this research is qualitative research. According to Creswell and Poth [9], qualitative research is a study that composes a complex picture, examines words, reports in detail from the respondent's point of view, and conducts studies on the circumstances experienced. The data used were the results of observations and structured interviews conducted on creative industry business actors which were then described in more depth to describe the phenomenon under study, which was related to how the supply chain management model was applied by the creative industry in Bandung.

This study involved ten companies that contributed to conducting face-to-face structured interviews. In determining the final sample size, it refers to the guidelines from Guest, Bunce, and Johnson [10] which states that 6–12 interview data are sufficient for developing meaningful themes, valuable interpretations, and data saturation. It means that no more meaningful information is found, and information gleaned from further interviews proved to be repetitive. The 10 companies studied were included in the fashion, culinary, and craft sub-sectors.

2.1   Data Analysis Technique

The data obtained based on the results of interviews with 10 creative industry players in Bandung were analyzed using the assessment rubric method. The assessment rubric is a guideline for scoring (guidance scores) in subjective assessments [11].

In the scoring rubric, there are 3 parts, namely the rating scale, performance criteria, and indicators. A rating scale is a number that will be chosen to judge a performance based on the available indicators. The performance criteria are related to what things are assessed, and indicators are a measure as a basis for providing an assessment. The type of scoring rubric used in this study was analytic scoring, where the assessment was carried out by analyzing the scores given by 10 creative industry players in Bandung on the dimensions available in the SCM variable. In the SCM variable, the strategic supplier partnership dimension consists of five (5) indicators, customer relationship consists of four (4) indicators, and information sharing has three (3) indicators so that the operational variable and scoring rubric for SCM variable become as Table 1.

Table 1. Operational variable and Scoring Rubric for SCM variable.

Variable	Dimension	Indicators	Scoring Rubric
Supply Chain Management (SCM)	*Strategic Supplier Partnership* [7]	1. Our company prioritizes quality as the main criterion.	5 = All indicators are met; 4 = Four indicators are met; 3 = Two-Three indicators are met; 2 = One indicators is met; 1 = No indicators met;
		2. Our company always solves problems together with suppliers.	
		3. Our company provides ideas to suppliers in improving product quality.	
		4. Our company has a continuous improvement program that involves suppliers.	
		5. Our company always includes suppliers in making a strategic plan.	
	Customer relationship [7]	1. Our company interacts well with customers to set delivery standards for responding to customers.	5 = All indicators are met; 4 = Three indicators are met; 3 = Two indicators are met; 2 = One indicator is met; 1 = No indicators met.
		2. Our company measures and develops customer satisfaction.	

Table 1. (*continued*)

Variable	Dimension	Indicators	Scoring Rubric
		3. Our company is always looking for what the market wants in the future.	
		4. Our company always facilitates customers who need help.	
	Information Sharing [7]	1. Our company always informs partners on issues that can affect business.	5 = All indicators are met; 4 = Two indicators are met; 3 = One indicator is met; 2 = No indicators met;
		2. Our company constantly exchanges information with business partners in making business plans.	
		3. Our company always cooperates with business partners in resolving changes that may affect their business.	

3 Result and Discussion

In the strategic supplier partnership dimension, indicator 1: "Our company prioritizes quality as the main criterion" was owned by all 10 companies studied. Based on the results of further interviews, the criteria for selecting suppliers were quality of goods, commitment, compatibility with prices and products, and responsibility. Indicator 3: "Our company provides ideas to suppliers in improving product quality" is the second largest indicator owned by the companies studied with a total of 8 companies that meet this indicator. Most companies answered that they provided advice related to quality

improvement in the supply of certain types of goods or the provision of goods with certain specifications according to the company's wishes.

The indicators that are at least owned by the companies studied are indicator 2 and indicator 4. In indicator 2: "Our company always solves problems together with suppliers.", generally, the companies studied chose to solve their problems internally and did not involve suppliers in problem-solving. In indicator 4: "Our company has a continuous improvement program that involves suppliers.", there are several companies that implemented continuous improvement programs, but most of the companies studied did not involve suppliers in its implementation. Indicator 5 is "Our company always includes suppliers in making a strategic plan" becomes an indicator that was not owned by all companies studied. Most of the companies studied considered that strategic planning is a company secret and should only be known by certain internal parties within the company. Most companies also considered that suppliers are an external part of the company, so they do not include suppliers in a strategic plan. From these findings, it can be concluded that most of the companies studied considered suppliers only as providers of raw materials where the involvement of suppliers is only limited to matters of raw materials needed by the company (Table 2).

From the results above, the implementation of the strategic supplier partnership dimension is dominated by medium-scale companies, with a total of 3 indicators being met. Meanwhile, other companies are micro and small-scale companies that only meet one or two indicators. It is shown that the larger scale of a company, the greater possibility of implementing the strategic supplier partnership dimension. This can happen because the larger scale of a company, the company can be more aware of the importance of cooperation in one chain to produce a larger value chain. Meanwhile, the smaller the scale of a company, it is less likely to implement the strategic supplier partnership dimension. Most micro and small companies do not understand that the resulting value chain will be bigger when they can work together in one chain instead of competing in one chain.

Table 3 shows that indicator 4: "Our company always facilitates customers who need help" is fulfilled by all respondents. Based on further interviews, the company facilitated complaints from its customers through direct interaction or using media such as e-mail, Instagram, marketplace, and telephone. Most companies answered those complaints by investigating first what is the cause of the complaint, then looking for solutions such

Table 2. Rubric Assessment for Strategic Supplier Partnership

Dimension	Indicator	1	2	3	4	5	6	7	8	9	10	Score
Strategic Supplier Partnertship	1	V	V	V	V	V	V	V	V	V	V	10/10
	2	V					V					2/10
	3	V	V		V		V	V	V	V	V	8/10
	4				V							1/10
	5											0/10
	score	3/5	2/5	1/5	3/5	1/5	3/5	2/5	2/5	2/5	2/5	

Table 3. Rubric Assessment for Customer Relationship

Dimension	Indicator	1	2	3	4	5	6	7	8	9	10	Score
Customer Relationship	1			V	V	V	V	V	V	V	V	8/10
	2		V	V	V	V	V	V	V			7/10
	3			V	V	V	V	V	V	V		7/10
	4	V	V	V	V	V	V	V	V	V	V	10/10
	score	1/4	2/4	4/4	4/4	4/4	4/4	4/4	4/4	3/4	2/4	

as replacement with money or other products. After that, the company will use it as an evaluation material, so similar complaints do not happen again.

Then indicator 1, "Our company interacts well with customers to set delivery standards for responding to customers" becomes the second most common indicator which is fulfilled by respondents with a total of 8 respondents who meet these indicators. Most companies answered that they researched the standards carried out by their competitors in setting standards. Companies also interacted with consumers by receiving feedback or reviews from customers. Meanwhile, some companies asked customers questions directly about their opinions and suggestions in terms of service and the final product.

The third indicator is "Our company is always looking for what the market wants in the future" also met by 7 respondents out of 10 respondents. In indicator 3, the respondents had various answers regarding their way of knowing what the market wants in the future. Some of the ways that respondents used to find out their desires were through direct market observations, consumer surveys using Google media, or directly to consumers. There were even respondents who conducted a survey of competitors.

Based on Table 4, indicator 3 "Our company always cooperates with business partners in resolving changes that may affect their business." is the indicator most fulfilled by the respondents with a total of 8 companies that meet this indicator. Most of the respondents answered that the company and its suppliers informed each other about any conditions or changes that affected the business related to changes in ordering goods in terms of quantity and quality. The company could quickly respond to consumer requests if there were some changes such as shortages of raw materials or the existence of other substitute products with that information. Meanwhile, the supplier could estimate the right time to

Table 4. Rubric Assessment for Information Sharing

Dimension	Indicator	1	2	3	4	5	6	7	8	9	10	Score
Information sharing	1		V	V		V				V	V	5/10
	2			V			V					2/10
	3	V	V		V		V	V	V	V	V	8/10
	score	1/3	2/3	2/3	1/3	1/3	2/3	1/3	1/3	2/3	2/3	

provide the raw materials needed by the company. Suppliers could earn the trust of the company so that they could build long-term relationships.

Indicator 2 "Our company constantly exchanges information with business partners in making business plans" is the indicator that is the least fulfilled with a total of only 2 respondents who met this indicator. The two respondents were companies with few suppliers as the sourcing strategies used. This sourcing strategy tends to have a long-term relationship with the supplier. Therefore, the long-term relationship between the supplier and the company makes the supplier earn the trust of the company, which ultimately results in the ease of exchanging information between the two when carrying out a business plan.

According to Heizer, Render, amd Munson [8] companies with sourcing strategies that utilize many suppliers tend to have short-term relationships with their suppliers. Therefore, short-term relationships can make it easy for suppliers to change. This is what ultimately results in obstacles for companies in carrying out information-sharing activities with business partners.

4   Conclusion

The customer relationship dimension was the dimension that respondents pay attention to the most. Most respondents were companies that produce and sell their products directly to consumers so the customer relationship dimension is the most important thing for the company for now. Thus, companies are expected to be able to maintain the good relations that have been built with their consumers.

On the other hand, the strategic supplier partnership dimension was the dimension that got the least attention. There were still many companies that did not meet the indicators on this dimension, especially indicators related to cooperation with suppliers. Most of the respondents had many suppliers so they had a short-term relationship with their suppliers. Therefore, it was difficult for the company to implement the strategic supplier partnership dimension. It also made the information-sharing dimension got unfavorable results. With this condition, it was difficult for respondents to share information with their business partners who are suppliers considering that suppliers in this company will easily change. For this reason, business players understand the importance of cooperation in a chain. The value chain will be greater not when it can compete in one chain but cooperate in one chain.

After conducting this research, it is recommended to conduct research with a larger sample. Thus, further research data can be generalized and become a good guide for creative industry players as a record of things that need to be fulfilled in order to run efficiently.

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