

**Analysis of Success Determinants of Traditional Handicrafts  
Transformation in To Creative Industry: Studies on Bamboo Creative  
Industries in West Java Province, Indonesia**

**Anang Muftiadi\*\***, Encep Sopandi\*, Sam'un Jaja Raharja\*\* & Erna Maulina\*\*.

\*Department of Business Administration,  
Nurtanio University,  
Bandung Indonesia

\*\*Department of Business Administration,  
Padjajaran University,  
Bandung Indonesia

**Abstracts**

Bamboo products are types of handicraft products that have been long known by people in Indonesia and are now more varied in functional and/or artistic aspects. Therefore bamboo industry in West Java has transformed into one of the renowned creative industries, besides that West Java is also known as centre of bamboo plantation. These bamboo products are handicraft products, wicker, bamboo house, furniture and traditional musical instruments. The success of this transformation can be evaluated on the performance, internal and external factors and its relationship and overall on industry competitiveness. Based on Man and Chan's Approach (2002) in Jones and Tilley (2003), the dynamic nature of competitiveness can be identified based on competence: opportunity, relationship, conceptual, organizational, strategic and commitment, associated with external factors such as: market heterogeneity, technological sophistication, market attractiveness, industrial product life cycle, market demand, and competitive concentration.

The results showed that bamboo musical instruments, bamboo house and furniture were in better performance than crafts and wicker. Musical instruments are most prominent in terms of performance, process/competence and external factors. In the case of bamboo creative industries in West Java, it can be concluded that the success of the of the traditional bamboo product performance is determined by the dimensions of excellence in process, especially on the commitment and ability of the industry to respond to external factors, market heterogeneity and attractiveness.

**Keywords:** Creative Industry Transformation, Internal Competence, External Factors

## 1. INTRODUCTION

Bamboo crafts have long been existed in Indonesia and some of them have transformed into small-medium business that can be a major source of income. Some bamboo crafts are able to transform into creative industries in Indonesia. Transformation is determined by the ecosystem of creative industry, namely the interdependent component of creative value chain; nurturance environment; market and archiving. The development of creative industry in Indonesia from 2008 to 2014 indicated increasing number of creative effort and public interest to enter into creative industry. There were about 5.4 million of business in the creative industry in 2013, with economic growth rate of 5.76 percent. The highest value-added contributors to the creative industries include fashion, culinary, handicraft products, publishing and printing.

Bamboo handicrafts in West Java are supported by the growing number of bamboo plants in the region. West Java is one of the most bamboo species oriented regions in Indonesia. As many as 150 species of 160 species of bamboo are in West Java (Suanda, Pikiran Rakyat Daily News, 03/06/2013). Therefore, Ministry of Forestry in 2013-2014 had established West Java as National Bamboo Center. The mapping results from Government of West Java Province, West Java National Craft Council shows that bamboo craft products have many types such as various woven, musical instruments, accessories, knock-down house, furniture (tables, chairs, bed), and the others.

Based on the potential of bamboo plants and various handicrafts that already exist in West Java, transformation into creative industry products is an important key for source of income in small and medium enterprises. The important factors of transformation source need to be identified from both internal, external side and performance achievement. This paper aims to explore the internal factors of bamboo handicrafts as well as external factors that determine its performance as a creative industry.

## 2. THEORITICAL BACKGROUND

The existence of bamboo handicrafts in general usually supported by natural resources of bamboo plants in an area which then develop variations of traditional exotic products, functional products or other functions. Due to the support of natural resources, exoticts and functions of the product can be transformed into creative industries making bamboo handicrafts turn into an attractive business.

Study on transformation of bamboo handicraft business in Indonesia seems similar to other bamboo producing countries. Among them are the writings of Lee, Barnes, and Rend (2016) regarding the description and challenge of bamboo handicraft revitalization in Taiwan which faces competition with cheap imported products. The article states that;

*Broad (bamboo) industry development in a sector dominated by small to medium-sized, family-owned firms will need to overcome significant historical legacies, but it is undoubted that the industry will need to come together to achieve the required innovation in manufacturing processes and New product development. ... successful cultural industries need a critical mass of creative innovators, entrepreneurs and skilled workers and advanced manufacturing capabilities. The main hurdle to the revitalization of Taiwan's bamboo industries is a lack of innovation culture in manufacturing companies to drive new product development compounded by design graduates' limited exposure to bamboo as a material. The revitalization of Taiwan's manufactured bamboo products sector requires an urgent injection of enhanced capability in design, design management, manufacturing systems and marketing on an industry scale scale to withstand the impact of sharp, multilateral global competition and increasing customer expectations.*

The above statement indicate consideration in the revitalization of the bamboo handicraft industry or its transformation into a creative economic sector. In terms of innovations Iacob and Pantea (n.d.) mentioned that;

*A key capability is the capacity to innovate, and to ensure continuous improvement in product and process development. If this is the case, then the emphasis is in production as well as for the productive sector, but also for the whole national system of innovation.*

Transformation towards the creative industry basically requires internal innovation and support by national innovation system to achieve maximum results. It is also important to look at the characteristics of the sector. Bamboo products, which is the focus of this research are usually micro, small-medium scale of production based local natural resources. This business characteristic, as Mahoney and Pandian (1992) mentioned, is facing increasingly complex competition and internal crisis and can be explained using the

theory of resources-based strategy. Furthermore, Barney (1991) stated that *the source of sustainable competitive advantage of micro, small and medium enterprises are competencies and resources of value to customers, uniqueness, difficulties to imitate and to replace, and ability to maintain a good position in competition in the industry*. Resources Base Value approach (Wernelfelt, 1984, Barney, 1991, Amit and Schoemaker, 1993) argued that high business performance will be more easily achieved if the company has competence of resources and reliable competitiveness.

In addition to this potential, due to the characteristics of micro, small and medium enterprises, it will generally face the problem of entrepreneurship failure, as stated by Scarborough and Zimmerer (2003) who suggested that the failure of entrepreneurs in running micro, small and medium enterprises among others due to: *management incompetence, lack of experience, poor financial control, lack of strategic management, uncontrolled growth, inappropriate location, lack of inventory control, and inability to make entrepreneurial transition*.

To explore the empirical factors of bamboo handicrafts in West Java, the indicator to be used is based on the writings of Man and Chan (2002) cited by Jones and Tilley (2003) on essential competencies for the micro, small-medium industries that include (1) Internal factors such as opportunity competencies, relationship competencies, conceptual competencies, organizational competencies, strategic competencies and commitment competencies (2) External factors include market heterogeneity, technological shop system, market attractiveness, product life cycle industry, market demand and competitive concentration. Both of the above aspects are estimated to determine the transformation of bamboo handicraft business and the performance such as sales growth, business profitability, market share, customer satisfaction and product quality.

### 3. METHODOLOGY

This study used qualitative methods through interviews from personnel associated with businesses as well as from local governments dealing with bamboo handicrafts. Indicators of the aspects studied include:

- Characteristics of bamboo handicraft; woven, furniture, bamboo house, musical instruments and various handicrafts.
- Internal factors (process); business competencies, opportunities, relationships, conceptual, strategic and commitment from employees within organizations.
- External Factors; market heterogeneity, technological sophistication, market attractiveness, product industry life cycle, market demand and competitive concentration.
- Performance; sales growth, business profitability, market share, customer satisfaction and product quality.

The interview results are then classified according to the indicator group and given sign of strength / weakness. The analysis is conducted on general trends of data patterns and specific sections. Sources of data were taken from bamboo handcrafters, Bamboo Handicrafts Center in Sukabumi, business brokers, universities, furniture business associations, international marketing associations, bamboo figures, government, community and national craft council, total 36 people.

### 4. ANALYSIS

Bamboo based handicraft in West Java can be classified into 5 (five) woven products, furniture, bamboo house, musical instruments and various handicrafts. The characteristics are as follow;

- Woven bamboo, heritage product that driven by the obligation of conservation and produced as side job. Variations of products are numerous and vary between regions. The products, processes and marketing of this type of handicraft have not transform into creative industry.
- Bamboo furniture, such as furniture, functional and artistic design, rattan substitution. Raw materials are logging in the right time, well processed so that it lasts for tens of years. This product has undergone a creative transformation process, but the production and marketing processes are developed insufficiently.
- Bamboo house, comfortable material for housing, natural, shockproof, environment friendly and has a knock-down system. This product has undergone a creative transformation process from the

original product. Production process has grown, but the marketing is not creative enough to be developed.

- Bamboo musical instruments, well-known in Indonesia and abroad, such as angklung and calung. This product is in standard form or fixed, but the production process has undergone creative process of transformation. Marketing has grown creatively and is associated with tourism events, statehood and are widely known in the community.
- Various Bamboo Crafts, in various of functional and aesthetic crafts that are, for example in the form of ornamental rice fields from bamboo roots, decorative lamps, hoods, flower pots. This product is quite a lot of new creative product variety, the process is new but standardized. Nevertheless marketing has not developed enough creatively.

In the aspect of process competencies (internal factors), the crafters has an average ability to see opportunities, relationships, concepts, strategic and commitment in doing business, when compared to other bamboo handicrafts. Bamboo crafts for furniture and home competence process is lower than the craft of musical instruments, but still much more prominent when compared to the various other handicrafts and woven.

The context of the external environment surrounding the bamboo craft is essentially quite positive at this point. The enthusiasts of creative industrial products made from bamboo raw materials are growing, ranging from users for their own purposes, tourism business, restaurants, and hotels displaying bamboo based products as an attraction (Pikiran Rakyat Daily News, 10/12/2014). The mapping results from the Industry and Trade Office of West Java Province, Dekranasda of West Java, and the Office of Cooperatives and SMEs West Java Province can be seen that the marketing of bamboo products, in addition to local market, also to Jakarta and Bali, even on woven products, furniture and musical instruments Angklung already exported to Malaysia, Egypt, Saudi Arabia, America and Hong kong. Export competitors come from the Tiongkok, Thailand, Philippines, Brazil and Vietnam. The type of export competition is in multi aspects, such as price, quality, product variance, uniqueness and ISO certificate. In interview with Head of West Java Industry and Trade Office (2014), it is said that Indonesian bamboo handicraft export are generally more expensive than PRC, and many Indonesian products have not been certified internationally (ISO). Strength and durability of goods from the Tiongkok and Philippines is generally better, because it has been using modern preservation technology. Competition in the domestic market, especially for Bali and Jakarta market, bamboo handicraft products of West Java compete with bamboo handicraft products from Sleman and Sendari, Yogyakarta. Foreign competition also emerged from China, which is similar products made of plastic materials such as household products and children's toys products.

From the five bamboo handicrafts, the pattern of external factors almost is identical to the internal factors, namely the musical instrument is more prominent than others, followed by handicrafts and bamboo furniture. In terms of external factors, woven crafts are lagging behind other varieties.

The performance of the bamboo handicraft business generally does not seem to reach the optimal scale. Crafts of musical instruments, furniture crafts and bamboo houses are relatively equal and performance shows a pretty good situation. Two other products are less performing due to different factors. The woven craft is relatively viable as it is based on demand for use in everyday household life. Usually sold at a relatively cheap price. Multifarious crafts are usually sold at higher prices because as an artistic contents, but turnover is usually not too big or not steady.

Table 1. Details of Bamboo Craft Information in West Java

DIMENSIONS	Woven	Furniture	House	Music Instrument	Varios Craft
<b>CREATIVE TRANSFORMATION</b>					
Product	--	+	+	+	++
Process	--	-	+	+	+
Marketing/ Network	--	+	+	++	-
<b>PROCESS COMPETENCIES (INTERNAL)</b>					
Opportunity	-	+	+	++	-
Relationship	-	+	+	++	-
Conceptual	--	+	+	++	--
Strategic	--	+	+	+	-
Commitment	+	++	++	++	-
<b>EXTERNAL FACTORS</b>					
Market Heterogenity	--	++	++	++	+
Technological Sophistication	+	+	+	++	+
Market Heterogenity	-	++	+	++	+
Product Industry Life Cycle	-	+	+	+	-
Market Demand	+	+	+	++	+
Competitive Concentration	-	+	+	++	+
<b>PERFORMANCE</b>					
Sales Growth	--	+	+	+	-
Business Profitability	--	+	+	+	-
Market Share	+	+	+	+	-
Customer Satisfaction	+	+	+	+	+
Product Quality	+	+	+	+	+

Table 2. Mapping of Bamboo Craft Business in West Java

DIMENSION	HIGH	MEDIUM		LOW	
Creative Transformation	▪ Music instrument	▪ Houses ▪ Various Crafts	▪ Furniture		▪ Woven
Internal (Process Dimensions)	▪ Music instrument	▪ Furniture ▪ Houses		▪ Various craft ▪ Woven	
External Factor	▪ Music instrument	▪ Furniture	▪ Houses	▪ Various craft	▪ Woven
Performance		▪ Music instrument ▪ Houses ▪ Furniture		▪ Woven ▪ Various craft	

In this research, musical instruments, home and furniture are included in creative products when compared with other bamboo products such as woven and bamboo handicrafts. In general, the performance of bamboo handicrafts, musical instrument, and furniture is higher than various other handicrafts and woven, although all the three do not show maximum performance. The performance of bamboo musical instrument can be achieved even though the products are still categorized as traditional goods, but its process and adaptability to external factors are high. Bamboo house and furniture have the same performance level with musical instruments, but with more developed products. Although they are supported by good process, but not yet enough to adapt to external dimensions. When adaptation to external factor is better, it is believed that performance can be maximized. In various handicrafts, although the product is relatively creative, but

the process of manufacturing has not developed with reference to external factors effectively and yet can be a factor of growth and performance. The bamboo woven craft performance are relatively low, because not only of low internal and process dimensions, but also the low of adaptability to the external environment.

#### **5. CONCLUSION**

- The creative transformation of bamboo handicraft products in West Java has different levels of creations. Music instruments, bamboo house and furniture are creative products when compared to other bamboo products such as woven and various handicrafts. This creative value is on the product, process and the market. In general, the performance of bamboo handicraft business in West Java has not been maximized.
- High-performance of bamboo handicraft products are bamboo products that have strong internal processes and are able to adapt to external dimensions. Bamboo products that the process is not creative but able to adapt to the external environment can have a higher performance.
- Adaptability to external dimensions is an important key to the performance of bamboo products, although the internal process dimensions are not high enough.

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