# Diamond Cluster Porter's Model to Increase Global Competitiveness: A Study on Indonesian Weaving Craftsmen

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## Diamond Cluster Porter's Model to Increase Global Competitiveness: A Study on Indonesian Weaving Craftsmen

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#### Abstract

This article describes the implementation of Porter's model diamond cluster in weaving artisan in Indonesia. The study was conducted with a descriptive qualitative approach. Data obtained by interviews and in-depth interviews. Data information was obtained from the craftsmen who were members of the cooperative community of entrepreneurs and Troso weaving craftsmen. The results showed that the competitive factors of suppliers, consumers, new players (new craftsmen), and competitors each had practical and strategic problems. The conclusion from the research needs to improve community performance related to competitive factors sustainably and encourage artisans to increase independence so that business sustainability can be guaranteed and survive in global competition.

**Keywords:** Diamond Cluster model, cluster model, globally competitive, Indonesia weaving craftsmen

#### 1. Introduction

Weaving, a manual-based textile product using a non-machine loom (ATBM). The unique form of weaving comes from the circular motion of the tool [1]. Weaving includes the creative industry, community-based, with motifs that contain a part of the culture, unique so that the motives become regional or state identity. Some countries such as the Philippines, Thailand, India, Australia and Indonesia have traditional blanket products that are similar to the weaving tradition [2]. The weaving patterns used are woven checkers, twill weavings, woven fabrics, yarn weaving, and woven coils [3]. In Indonesia, weaving production constitutes the majority of the main occupations of the people of Troso village, one of the weaving villages that reach more than a thousand businesses. Troso weaving has meaning and function in the names of motifs [4]. The Weaving as a business provides economic, social, and welfare impacts for both the craftsmen or their entrepreneurs, the regions, and industrial entrepreneurs related to weaving. Weaving is a superior product of regions and countries that have global market potential-weaving, supporting the production of other goods, namely furniture, fashion, and textile-based crafts. New entrepreneurs can innovate through the concept of sociomateriality [5]. The concept of sociomateriality explains the focus of entrepreneurship in solving current problems. Problems faced by entrepreneurs and or weaving craftsmen are strategic and practical. Practical problems are related to the internal capacity of the business. Internal causes come from the way companies organize attention between the accuracy of targets and facts [6].

In contrast, strategic problems usually stem from macro policies, which impact businesses and weaving businesses, namely: labour, information technology for marketing, and changing consumer tastes. China places the workforce as a development strategy [7]. Information technology is used as a marketing competitive advantage factor [8]. The rapid development of technology information and changes in customer tastes become things to consider in competitive advantage [9]. The Diamond Cluster Porter's model is used as an approach that is used for micro, small, and medium scale businesses, which are many scales

in the weaving craft business in Indonesia. Porter's diamond frame, with its four dimensions, makes it possible to map relevant business characteristics [12]. Diamond Cluster [11] is widely used in cluster-based MSME development programs. Porter (1990) defines Clusters as "Clusters are geographic concentrations of firms, suppliers, related industries, and specialized institutions that occur in a particular field in a nation, state, or city" [12]. Another definition of the Clusters industry is the "geographical concentration of industries that gains performance advantages through co-location" [13].

#### 2. Methodology

The approach used is descriptive qualitative. The focus of the study is on the competitive aspects of craftsmen, who are members of the Weaving Troso Cooperative of 34 people. Data obtained by interview using interview guidelines and in-depth interviews to confirm further information, according to statements and data needed. The procedure is carried out in three stages, namely mapping based on the Diamond Poter's model, identifying competitive factors, and finding weaknesses and strategies to improve the competitiveness of weaving craftsmen. Interview results are tabulated, analyzed, and behaviours that are often described are converted into items [14].

The basic principle of Diamond Cluster Porter's is to identify the competitive factors of a business or business. The company's competitiveness can be obtained from marketing analysis based on data insights [15]. Competitive Factors of Troso Weaving Craftsmen, namely: suppliers, consumers, competitors, new players. Raw material suppliers consist of domestic and foreign yarn products, China, and India. Consumers, all walks of life. Competitors, weaving craftsmen from various countries, namely India, Australia, the Philippines, Thailand, Brunei. Competitors also take the form of substitute products, such as other types of ethnic-based textiles, such as batik, embroidery. Also, products derived from woven fabrics, for example, fashion made from woven. Plain weaving patterns provide strength and more attractive properties [16]. New players, not only new weaving craftsmen from the regional environment in Indonesia but also who are growing in various countries. A supporting system carried out by the government and other stakeholders. The function of the government cannot be replaced in terms of creating an atmosphere of nducive competition, broad development policies by providing facilitation, training, and efforts to increase the technical capacity of businesses and capital involving banking institutions. The government is oriented to changes in the political economy and the global environment [17].

In industry clusters, Porter considers social, cultural, and human contexts as capital in industrial competition. Consumer behaviour can be shaped through a positive social environment [18]. Diamond clusters use relative size with labour. Human resources are a factor driving the internationalization of small and medium-sized businesses [19]. This approach contributes to differences in size between countries [10], traditional culture and modern values coexist [20].

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#### 3. Results and Discussion

The results of this study indicate that all the competitive factors that exist in the weaving community have weaknesses not only due to internal factors, business capacity in the MSME scale but also those related to supporting systems, regulations, and facilitation provided by the government and other stakeholders. The majority of stakeholders in providing facilities were from the perspective of their respective interests. So that tends to the problem is not resolved correctly, and have an impact on competitiveness. Several factors from craftsmen must be integrated into understanding the business competition. These factors include human characteristics, culture, and social aspects of society. These factors affect the performance of craftsmen as the main actors.

The aspect of religiosity becomes crucial because the similarity of religion (religion and or belief) that is adopted should be a source of values and norms that are more easily understood. "Work is worship," a term often used by group members. As well as "must be sincere" or "lillahita'ala", "the important thing to try", and "fortune has been divided"—understanding of worship, a variety of ways to measure it. Worship is carrying out His commands, praying, giving alms, paying infaq, and paying zakat, and other obligations are considered perfect worship. While the form of habluminannas, obligations to fellow humans, and group members in the form of mutual help, mutual care, and mutual assistance are often overlooked.

Indicators of social capital used, such as social network and support structures social, and community participation, civic and political involvement, and empowerment. Trust in people and social institutions, tolerance of diversity, and altruism; philanthropy and voluntary work show that social capital has not yet developed in working together. The impact is that often the agreed program targets to be worked on together to progress the agreed conditions cannot work as they should. Reluctance wants to the sake of togetherness is an obstacle even believed to originate from the low social capital in the group or the community because it forms values and norms are still believed to be all due to their efforts and work. Understanding of social capital and other capital besides economic capital is rarely touched on in various coaching activities. Orientation on quantitative targets often ignores social interrelation-based processes in groups that will resolve the limitations of funds owned by the facilitator or business processes that cannot be completed with money or economic capital alone as explained in Figure 1.

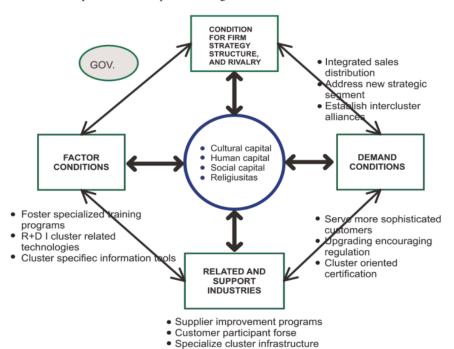


Figure 1. Diamond Cluster on Indonesian Weaving Craftsmen

In [21] put forward Clusters, as relationships between companies that also provide various complementary services, including consulting services, providers of education and training services, financial institutions, professional associations, and government

institutions. The cluster is essentially an effort to classify the core industries that are interconnected, both supporting industries, related industries, supporting services, economic infrastructure, research, training, education, information infrastructure, technology infrastructure, natural resources, and related institutions. (3) is sters are also a way to manage several economic development activities. In [22] argue that there are at least three framework forms for Clusters: Diamond models, flexible specialization, and collective efficiency. Developing countries applied the Diamond Porter model in developed countries. The Porter cluster model does not limit only to one industry but is broader. Diamond Cluster Model, including related industries, as well as other companies that have a connection in technology, the same input. By working together in one cluster, the companies / related industries will get high synergy and practical benefits compared to working alone. Clusters can form in cities, local regions, even countries [23]. Cluster development efforts out to revive the functions of group members in the cluster. Such suppliers of input factors, consumers, related industries, and supporters. A strategy with the industry in the cluster in order to win the competition.

In [24] shows that there is no relationship between competition and innovation. However, empirically the reality of the field shows that there are factors that must be involved. Economic factors, quantitative indicators, engagement of socio-cultural activities must be considered in the process of interrelation between competitive factors. The impact found by input providers, often unable to provide the type of fabric needed by the manufacturer. The threads provided are different colours and materials, even though the series is the same. There are Weaving craftsmen work hard in responding to the market because any model with the uniqueness of the ordering area can be fulfilled. In general, textile-based entrepreneurs do not yet have bargaining power over their products, including weaving. Often inferior to traders for practical reasons demands even though they have joined in a group/ community or cluster but have not been able to realize joint marketing—the tendency to be a follower and not a trendsetter. Limited working capital, not yet able to calculate the cost of production correctly, relies on profits without being accompanied by realistic cash flow.

In developing the textile-based industrial cluster, the combination and role of economic, social, cultural, and human capital and natural capital must be developed in a balanced and harmonious position. Because positioning economic capital is higher with other capital, as long as it happens, it will only plunge business groups on pseudo-success measures and be vulnerable to competition that occurs and comes from similar industries from outside the group. Businesses that are built are not rooted or not based on the same values and norms, so the level of trust is fragile.

#### 4. Conclusion

In the end, many theories which are the basis for developing and using approaches cannot be implemented in general. The uniqueness of the community and the region will be an essential background characteristic of the community that colours the community of entrepreneurs. The cultural dimension of the community will significantly affect the way of viewing and the workings of the community. So that it must be accommodated in the process of interrelation between individuals; individuals in groups to develop institutions in society that can ultimately be encouraged to realize better, more effective and efficient economic performance.

The Diamond Cluster approach can be used because it can map the competitive factors at increase the competitiveness of the industry and its members. However, accommodate social capital, cultural capital, human capital, and natural capital precisely specifically according to regional characteristics because the reality of the field shows that only relying

on economic capital is impossible to move the available resources. Economic capital is the biggest obstacle for businesses operating on a micro/small and medium scale (MSME).

Weaving craftsmen and their communities must always adjust to changes in consumer tastes that tend to change rapidly due to various influences. Which not only consider the price, but also the cultural value, product specificity, the philosophy contained behind the products produced and the multi-complex processes that must be passed both technically and socially. Consumers are becoming increasingly intelligent and will appreciate the product of the process, even the philosophy, and protection of their motives. Innovation is the key to increasing competitive factors.

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