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Business Strategy Analysis and Supply Chain Model to Support Competitive Advantages of Beta Ulos

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Abstarct: Traditional ulos is one of means used in the ceremonial events as well as for souvenirs in Batak. Presently, people aim to reclaim the use of traditional ulos called "ulos naso ra pipot", i.e., ulos which have high characteristic of quality and at the same time be able to characterize the meaning and values of 'Ulos Batak'. Unfortunately, the scarcity of traditional woven ulos production has made consumers hard to find it in the market. This circumstance occurs due to an increase in the production of modern ulos, those machine-made ulos which have been modified with a variety of design, pattern and colors, so that can be sold at a price cheaper than the traditional woven ulos. This study aims to study business strategy in the current traditional woven ulos. As results, a supply chain model has been proposed to support the coordination, management, production and distribution channels used to meet the market demand of traditional ulos.

Key words: Business strategy, supply chain model, ulos, demand, consumers

INTRODUCTION

Ulos is a typical Batak woven drapery which has a very important role in every ceremonial events in Batak. Initially, ulos as drapery is used to warm body, so that the term 'mang ulosi' or 'to give ulos' arise. Mang ulosi does not only mean as a gift, instead it is a symbol of blessing, affection, hope, goodness and virtues.

Ulos is made suitable to a given rule of size and pattern in accordance with its specified function (Fig. 1 and 2). According to Sumardjo (2002), ulos represents the traditional today beta ulos as a traditional enterpreneur as well as the other ulos weavers find difficulty to meet demands of traditional woven ulos. This situation occurs due to the presence of ulos machinary which can produce mass volume of machine-made ulos at a price relatively cheaper than the traditional ones. The value of ulos has shifted to just as souvenirs while the size and pattern does not comply with its intended function. Therefore, an effort mustbe made to gather people who have weaving skill and build an awareness towards traditional woven ulos as batak cultural artefact as well as a business. Batak Toba culture which takes the form of a tangible cultural artefact. Meanwhile, Pardosi (2008) described ulos as an object which is permeated by religious magical power.



Fig. 1: Ulos ragi idup



Fig. 2: Ulos ragi hotang

This study aims to investigate particular issues related to the production of traditional ulos: Why the traditional ulos is increasingly difficult to obtain? How does the strategy to increase the number of traditional ulos production? And why do we need a supply chain model to improve the traditional ulos business?

Overview of traditional ulos production and distribution:

Today, the widespread use of ulos machinary has lead to the increasing number of ulos modern production that goes much faster than the traditional ulos. Along with the increase in production, the prices of ulos modern is getting cheaper. Whilst, the traditional ulos fetch at an expensive price.

Interview with the ulos weavers find a fact that most of them do not want their children and descendants continue to weaving. This has caused the production of traditional woven ulos diminish and continuously become scarce.

According to Rajala any business, either a big or a small company needs to introduce an innovation of supply chain into their business. Previous studies found the cause of a business failure is due to mainly lack of innovation in supply chain coming from the insufficient information of supply-demand (Friefrich et al., 2015; Holt, 2013) no knowledge of industrial structures and unavailability of capitals. Therefore, in order to encourage the production of traditional ulos knowledge of supply chain is required ranging from materials procurement, human resources, weaving tools and machinary, target markets and marketing strategy. In this regard, enterpreneurs of the traditional ulos must have knowledge on the advantages of an efficient supply chain and interdepence in the production-flow as well as the disadvantages of neglecting of the sequence involved in the production and distribution of ulos.

Strategies to enhance supply of traditional ulos: Enterpreneurs play a crucial role in innovation and determining the business turnover. In order to innovate, it is important to have a strategy of supply chain. A responsive strategy between enterpreneurs and suppliers is inevitable (Hinkka *et al.*, 2013).

In this context, enterpreneurs must build partnerships with and strengthening of the suppliers network (Qrunfleh and Tarafdar, 2013). This strategy can be done through the improvement of market knowledge, the transformation of information, the communication of enterpreneurs-suppliers and an integrated planning and coordination (Braziotis *et al.*, 2013). Moreover, buildinga robust supplier network requires knowledge of supply-demand as well as capability to build mutual cooperation and profits.

Supply chain in business improvement: A business process improvement effort needs to study extensively the relationship of enterpreneurs-suppliers with emphasis on the identification of the existing problems, approaches and supply chain models required (Braziotis *et al.*, 2013). This is an integrated approach that involves an integration of overall business processes between the enterpreneurs and the suppliers (Hilletofth, 2012). This approach requires enterpreneurs to define the consumer needs and products being produced in order to meet the market demands which will enable them to maintain the long-term profits of their business.

Management of entrepreneurship needs to broaden its strategy and approach to suppliers by for instance, building the strategy of raw materials supply (Vlachakis *et al.*, 2016; So and Sun, 2010) designing the production and distribution system (So and Sun, 2010; Sharifi *et al.*, 2006) introducing outsourcing and distributor (Won *et al.*, 2007) and involving stakeholders (Sharifi *et al.*, 2006; Samaranayake and Laosirihongthong, 2016) into the business process.

MATERIALS AND METHODS

This study has selected beta ulos as a research object. The objects being observed include beta ulos as an enterpreneur of the traditional ulos, its suppliers, distributors and consumers. Data acquisition is done through interview and focus group discussion. Since, the study uses a combination of qualitative and quantitative data, the analysis demands a combination of research methods and approaches as well.

In order to figure out the competitive advantages of beta ulos, the SWOT (Strength-Weakness-Opportunity Threat) analysis is performed. The analysis is focused on the following hypotheses.

The 1st-hypothesis: A strong relationship between entrepreneurs and suppliers in the supply chain of traditional ulos creates competitive advantages.

The 2nd-hypothesis: The sustainability of the traditional ulos supply chain relies on its management and business strategy.

The 3rd-hypothesis: The greater number of suppliers in the supply chain provides higher profits for the traditional ulos entrepreneurs. In the analysis, mapping the business strategy onto the supply chain model used to explore the process of traditional ulos supply is done using the qualitative-descriptive method. Then, the stakeholder analysis is performed to seek factors applicable to improve the existing supply chain of traditional ulos. Finally, using the triangulation technique a supply chain strategy for beta ulos is formulated.

RESULTS AND DISCUSSION

Beta ulos supply chain: presently, beta ulos serves dominantly consumer demands for the machine-made modern ulos. The supply chain and operational management of beta ulos relies on the practice of the high number of inventories. This type of management provides good profits for beta ulos. However with the increasing demand of traditional ulos, beta ulos should seek an immediate improvement for its supply chain management. Figure 3 shows beta ulos supply chain.

In addition to the demands of ulos in the area of Toba Samosir, beta ulos receives demands from consumers living in Java Island as well, mainly from Jakarta and Bandung. In the beginning, these demands arise from the family members request for the traditional ulos. With the passing of time, the demands of traditional ulos has expanded and reached out to a wider society in Java Island.

Our study finds a profile of traditional ulos industry in Toba Samosir as described in Table 1. Meanwhile, the position of beta ulos supply chain in the industry is depicted in Fig. 4.

Strategy of beta ulos supply chain to improve business competitiveness: To create business profits and at the same time preserving traditional ulos as a tradition, beta ulos needs to strengthen their supply chain strategy, so they can produce and supply the traditional ulos on an on going basis in order to meet the wide spread consumer demands.

The position of beta ulos supply chain in Quadrant 2 shows a fact that despite external threats, adequate internal strenght is owned by the entrepreneur. To escalate the long-term business competitiveness, beta ulos must build such capacity for diversification and strategy to innovate. To do this, some new strategies can be formulated.

The S-O strategy: Seeking the talented traditional ulos weavers. Training and workshop on the techniques of traditional ulos weaving. Establishing a production house to enable weavers working together in groups. Setting selling prices desired by the traditional ulos weavers.

The W-O strategy: Increasing working capital through bank loans. Building inventories of threads and natural dyes. Providing scholarships for teens who work to weaving in between the schoold hours.



Fig. 3: Beta ulos supply chain

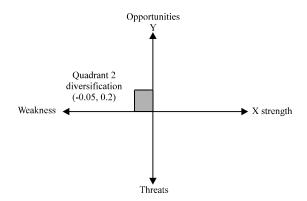


Fig. 4: Beta ulos supply chain: internal vs external factors

 $\underline{ \mbox{Table 1: Traditional ulos profile: internal-external factors} \\$

Variables	Bobot	Raiting	Nilai
Internal strategic factors; strengths			
Strong batak culture and ulos characteristics	0.25	5	1.00
Conventional ulos weavers still exist	0.25	2	0.40
Ulos materials available	0.25	3	0.60
Ulos being loved by people, especially batak	0.25	4	0.80
Easy to learn making ulos	0.25	2	0.40
Total strengths	-	_	3.20
Weaknesses			
The number of weavers are few and mostly	0.25	5	1.25
elderly people			
Parents disallow children to learn weaving	0.25	3	0.75
Production is few and produced by individuals	0.25	2	0.50
No regeneration of weavers	0.25	3	0.75
Total weaknesses	-	-	3.25
External strategic factors; opportunities			
The high number of demand for traditional	0.20	5	1.00
woven ulos			
The high expectation and demand on the	0.20	4	0.80
existence of traditional ulos			
Outsourcing for delievery and distribution	0.20	3	0.60
of traditional ulos available			
Application of ICT in promotion and sales	0.20	4	0.80
Bank loans available	0.20	2	0.40
Total opportunities	-	-	3.60
Threats			
Lack of interest of young people to learn weaving	0.20	3	0.60
The high number of production of ulos produced	0.20	4	0.80
by machinary			
Cheaper price of machine-made ulos	0.20	3	0.60
Weavers have no mutual cooperation	0.20	3	0.60
Raw materials come from outside Toba region	0.20	4	0.80
Total threats	-	-	3.40

The S-T strategy: Expanding the traditional ulos retail stores in Toba Samosir as well as in Java Island. Outsourcing shipping and delivery services for the traditional ulos. Building partnerships between the traditional ulos weavers. Increasing the outsourcing of traditional ulos raw materials supply.

The W-T strategy: Developing an archive photographs of ulos traditional used by the ulos observers. Creating the pride and majesty of traditional ulos. Profit sharing for the weavers by rewarding the highest production and the best of ulos weavers. Inviting stakeholders to participate in the effort of traditional ulos preservation

In order to improve the supply chain management, beta ulos decides to undertake a diversification strategy which is implemented through a set of actions: increasing the production number of traditional ulos, adding the number of suppliers, creating an integrated production and marketing plan, expanding the coverage of distribution area, monitoring service points at each distribution-level and managing the long-term relationship with customers.

Using this strategy, beta ulos is able to create a solid competitive advantage that can be measured by the ratio of delivery dependability, higher production capacity and on-time ability to meet consumer demands. Based on this achievements, we can conclude that those three research hypotheses are correct and acceptable.

Beta ulos supply chain model: Based on our analysis, it has been discovered that the improvement of beta ulos supply chain management should be done by emphasizing the following issues:

- Ensuring a sustainable supply chain so as to meet the long-term market demand
- Building and expanding networks amongst weavers
- Convincing suppliers (weavers) to continue weaving through profit sharing and reward programs

- Facilitating the procurement of ulos raw materials for suppliers (weavers)
- Opening a training house for public in collaboration with local government and private sectors
- Expanding the marketing area of traditional ulos by involving the use of ICT (Information and Communication Technology)

Figure 5 and 6 describe a new supply chain model that the study propose for beta ulos. By improving the supply chain management, beta ulos does not only collect the traditional ulos produced by the suppliers and selling them, instead they can contribute in the empowerment of the community by involving them in the weaving process of traditional ulos. Furthermore, beta ulos also involves in the initiative to build a training house used as a place to learn and improve the weaving skill of weavers. The house functions as a facility where weavers can meet and raise togetherness amongst them in the effort to increase the production capacity of traditional ulos. To attract more interest of weavers, beta ulos hasbuilt a weavers-stakeholders network as well as provides assistance for the procument of raw materials with favorable prices. In addition, beta ulos has also taken an initiative in the excavation of teen talent in weaving and provides them scholarships to attend training and courses.

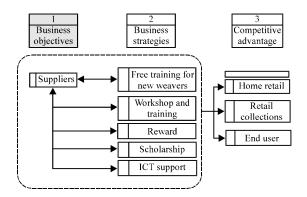


Fig. 5: The proposed beta ulos supply chain model

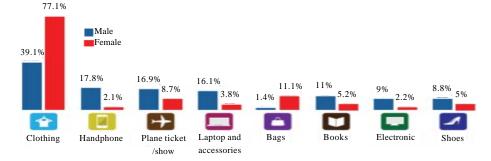


Fig. 6: Chart top buyers and products for online purchase in 2015 (spaceommerce.com)

By expanding the coverage of distribution area, beta ulos expects that this approach will lead them to the increasing number of traditional ulos production. Moreover, by outsourcing the delivery service it is expected to provide support for beta ulos to get broader access to regional distribution and marketing of traditional ulos, both in Java Island as well as in other parts of Indonesia.

The e-Commerce as one of distributing channels for beta ulos: Online purchase for textile and fashion products is the biggest purchase on the internet. According to the survey by spacecommerce.com in 2016, the highest online purchase in Indonesia is fashion item growing almost 40% from the previous year. It shows that there is a possibility of significant shifting from buying online from buying offline or people are starting to buy fashion items online for its convenience.

The popularity of traditional fashion among the fashion buyers since around 2009-2010 in Indonesia is also one of supporting factors of growing interest in purchasing ulos. As one of the traditional textiles, ulos could also use the e-Commerce or other online shops as distributing channels. There are growing numbers of online shops and e-Commerce with specialization in marketing traditional fashion such as qlapa.com, kravasia.com and heritage.id. These channels are starting to play an important role not only for the buyer moreover to the artisans.

Different from other e-Commerces where the products are usually massively produced from the factory, these e-Commerces are treating the artisan's product differently. These online stores understand that the process of creating and making of ulos is totally different from the massive products. Ulos as handmade textile took months to finish and the price is much higher from the usual fashion or textile products on the market. Thus, the online store's owners usually never demand the artisans to have plenty of stock on one period, rather they incline to expose the exclusivity and the extraordinary tribute of ulos textile.

Regarding the latest issue in the global marketplace, the e-Commerce could be a solution for reaching more customers of the ulos product. Technology as an enabler has the capability to increase the participation of small merchants like ulos artisans and sellers in the global marketplace. The participation itself certainly will open a broader market and possibly the global market for ulos as traditional handcrafts from North Sumatera.

CONCLUSION

Based on our findings, it can be concluded that the well-integrated relationship between enterpreneurs, suppliers, outsourcing, customers and stakeholders is a key to succeed in creating a business strategy and supply chain management for beta ulos. Based on our findings, we can conclude that a well-integrated relationship between enterpreneurs, suppliers, outsourcing, consumers and stakeholders is a key to succeed in creating business strategy and supply chain management for beta ulos. By improving its supply chain management, beta ulos can reach broader market and meet bigger consumer demands for the traditional ulos as well as contribute in the preservation of the traditional ulos and in the improvement of the weaver's lives.

To implement the supply chain model proposed, beta ulos has to pay attention to the main issues: ensuring the regeneration of weavers, ensuring the continuity of raw materials supply, expanding the coverage of distribution and marketing area and developing a capacity to meet consumer demands in a timely manner. The e-Commerce is one of the marketing strategies.

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REFERENCES

Braziotis, C., M. Bourlakis, H. Rogers and J. Tannock, 2013. Supply chains and supply networks: Distinctions and overlaps. Supply Chain Manage. Int. J., 18: 644-652.

Friedrich, V.D., S. Eichen, J. Freiling and K. Matzler, 2015. Why business model innovations fail. J. Bus. Strategy, 36: 29-38.

Hilletofth, P., 2012. Differentiation focused supply chain design. Ind. Manage. Data Syst., 112: 1274-1291.

Hinkka, V., K. Framling and J. Tatila, 2013. Supply chain tracking: Aligning buyer and supplier incentives. Ind. Manage. Data Syst., 113: 1133-1148.

Holt, G.D., 2013. Construction business failure: Conceptual synthesis of causal agents. Constr. Innov., 13: 50-76.

Pardosi, J., 2008. Makna simbolik umpasa, sinamot, dan ulos pada adat perkawinan batak toba. Table Contents, 4: 101-108.

Qrunfleh, S. and M. Tarafdar, 2013. Lean and agile supply chain strategies and supply chain responsiveness: The role of strategic supplier partnership and postponement. Supply Chain Manage. Int. J., 18: 571-582.

Samaranayake, P. and T. Laosirihongthong, 2016. Configuration of supply chain integration and delivery performance: Unitary structure model and fuzzy approach. J. Modell. Manage., 11: 43-74.

- Sharifi, H., H.S. Ismail and I. Reid, 2016. Achieving agility in supply chain through simultaneous design of and design for supply chain. J. Manuf. Technol. Manage., 17: 1078-1098.
- So, S. and H. Sun, 2010. Supplier integration strategy for lean manufacturing adoption in electronic-enabled supply chains. Supply Chain Manage. Int. J., 15: 474-487.
- Sumardjo, J., 2002. Archaeological Culture of Indonesia. Qalam, Yogyakarta, Indonesia.
- Vlachakis, N., A. Mihiotis, C.P. Pappis and I.N. Lagoudis, 2016. A methodology for analyzing shipyard supply chains and supplier selection. Benchmarking Int. J., 23: 443-455.
- Won, L.C., I.W.G. Kwon and D. Severance, 2007. Relationship between supply chain performance and degree of linkage among supplier, internal integration and customer. Supply Chain Manage. Int. J., 12: 444-452.