HOW TO ACHIEVE IMPROVING THE FARMER SHARE WITH MODEL SUPPLY CHAIN MANAGEMENT FOR SME's TEMPE – TOFU LAMPER TENGAH

Azis Fathoni SE MM
Dosen Prodi Manajemen Fakultas Ekonomika dan Bisnis
Universitas Pandanaran Semarang

ABSTRACT

Information systems through the model of the use of Supply Chain Management model for SME's Tofu Tempe "Gumregah" Lamper Tengah became as Base Knowledge to use recently. The problem at this time is the price of soybean as the main raw material is very expensive and must be imported from the USA and there is no alternatie raw materials and from other suppliers. Implementation of information technology from Hulu – Hilir raw material as the main supply chain of tempe-tofu production will become the basis of Home Ekonomic management for members of the community that know SME's owners

The main target of information technology on supply chain management is to refer maintain this small business continuity. This study aims to analyze the knowledge of Supply Chain Management which is often known as Supply Chain Management (SCM) which is expected to improve the handling of good raw materials and decrease the allocation of raw materials management cost.

The results of research show that supply chain management strategy used is to use mix 1 supplier and 2 – 3 suppliers. Many Small Businesses Tofu - Tempe is developing their own supply chain in a different context than the traditional supply chain. Looking at the supply chain developed by SME's Tempe - Tofu Lamper Tengah shows different process innovations to meet the needs and ultimate consumer satisfaction. It also results in innovation and product innovation processes in delivering goods to end users.

It also identifies the different processes and product innovations generated from a marketing perspective to put the end consumer first. The study was conducted using interviews with SME's who are beneficiaries of Bapedda Kota Semarang. Data collected through actual observations on the implementation of the Great Gateway Concept (**GERBANG HEBAT**) of Semarang City.

Key Words: Information System, Raw Material, Continuity, End User

INTRODUCTION

Lamper Tengah as the chosen village in the GERBANG HEBAT program (Joint Movement for Poverty Reduction and Unemployment through Economic Harmonization of Ecosystem Education and Community Together Ethos) is the location of small business centers that are expected to develop the potential of SMEs Know Tempe to be a big industry. Some people in Lamper Tengah have a livelihood in the field of food business made from soybeans. Know-making activities in Lamper Tengah has become a traditionally Home Economic activity that is managed by boiler system, traditional system and even now supported by CSR and Semarang City Government through Gerbang Hebat of Kampung Tematik.

The market penetration capability is increasingly widespread, followed by the supporting business of Penyet Culinary in Semarang, making this small business become a mainstay. But now the tempe tofu SME's in the industrial area know Lamper Tengahr often experience the fluctuations in production associated with the main raw material of Soybean.

1

Compared to local soybeans as the main ingredients of their production they prefer to use imported soybeans for the reason of local soybean moisture content is still high enough, while for imported soybean is very dry and good for raw materials making tempe and tofu

On the other hand, the using of imported soybean is due to its abundant stock and never lack. This is different from the local soybean stock, which is only abundant at harvest time, while when the harvest has no stock anymore. Local soybean farmers are currently in a hurry to sell their products to broker

However, if import constraints occur such as the rupiah rate against the dollar, the increase of import duties on imported goods and the increase of VAT resulting in soybean price increase up to 100% causes tempe and tofu craftsmen to experience production difficulties. This small business is vulnerable to supply chain instability in both raw and market aspects. Such a small industry is very susceptible to changes in the price of raw materials this is because the business of tempe tofu has a special characteristic that is the cost of production is for raw materials. This is not a problem, if the raw materials can be met from within the country.

The increase in soybean prices is due to climate change in soybean producer countries - United States. So far, the needs of soybean in Indonesia are mostly obtained from imports. Data from the Ministry of Agriculture and the Ministry of Trade show that soybean demand for tempe and tofu industry in Indonesia per year reaches 1.9 million tons. Of that amount, 1.3 million tons are met from imports. Problems that occur in small and medium-sized tofu industry and tempe show a weak bargaining position Small and medium-sized Enterprises in a supply chain. Tofu and tempeh with typical products that have been considered traditional foods turned out to have a high import content that is

vulnerable to change s in raw material prices.

Besides internally, tempe - tofu business have internal constraints as described above, another problem that often arises is with the relation of the customers. One of the customers in the business trade chain knows this is a culinary Penyet. Culinary Penyet business in the city of Semarang growing almost in all of Semarang areas.Many culinary business rise up either permanent or non permanent. For business Tempe - Tofu difficulty controlling soybean price increase which resulted in the decrease of raw material allocation which will be provided for order production process of Tempe - Tofu which will ready to be accommodated by permanent customer like culinary business.
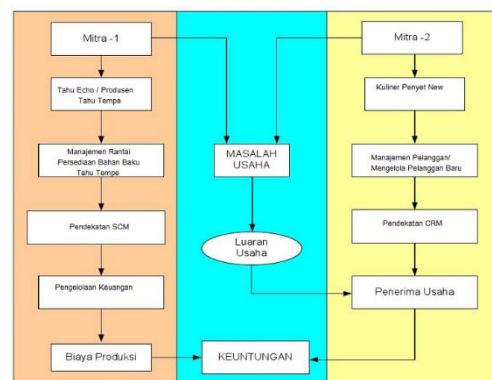

Figure 1

From the Figure 1 above shown that there are some parties who need a synergy equivalent to anticipate the problem that comes from each of his business. To serve the needs of the customer, small and medium Enterprises must be able to solve the internal constraints handling raw materials.

On the other hand the customer wants the level of service to customers can be more optimal with the model of structured handling.In real problems above will be taken solution with intergrative model of each other so easy to be applied in step of strategic

development of processing business of Tempe Tofu lamper tengah. One of them is using the information system used to calculate the value of the supply chain and also the value of the customer chain.

One of the weaknesses of SMEs to develop is that they have not clearly identified the supply chain used in SMEs. This is because SCM is still oriented to large-scale companies. Therefore, this study aims to find out how the supply chain for the creation of the value chain in SMEs.

LITERATURE REVIEW

Supply Chain Manajemen

A good industry policy is to have a perfect supply chain. That is, this industry can be analyzed and anticipated potential problems from upstream to downstream. The order of supply chain management (SCM) is usually used to analyze the chain of an industry. According to Schroeder (2000), supply chain management is the planning, design and control of the flow of information and materials in a supply chain to meet current and future needs efficiently.

In this analysis, an industry must be analyzed from the availability of raw materials, including who the supplier is and at what price level and how much is needed, the production process and the number of producers, the distribution chain and the last is the consumer. Supply chain management further provides information for the preparation of an industry policy design in detail. According to James A Fitzsimmons (2006), the physical form of a good in a supply chain can be seen as a network of value added processing materials, each defined by input supply, materi demand output. Following figure belc show the cycle of SCM Process.
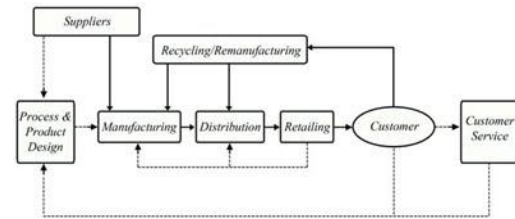

Figure 2 –
Supply Chain Managemen Model
James A Fitzsimmons (2006)

Stevenson defines supply chain management as a strategic coordination of the supply chain in order to integrate supply and demand management. Awareness of the existence of cheap, fast and quality products gave birth to the concept of Supply Chain Management (SCM). The concept of Supply Chain Management (SCM) has been the focus of attention since the 1980s (Moore, 2008). The role of suppliers, transport companies and distributorship networks is in this case indispensable. The supply chain includes all the processes and activities involved in the delivery of the product to the user's (consumer's) hand. In the end, SCM aims to maximize customer value (customer value) and customer service and sustainable competitive advantage (Hamisi, 2010)

In the face of globalization and an increasingly competitive business environment, small and medium Enterprises are required to improve their supply chain performance. This is because Small and Medium Enterprises are one of the driving forces of the economy and play an important role in economic growth in developing countries because it can open employment opportunities and support for large-scale companies.

Further analysis after supply chain management is value chain analysis. Porter (1985, 1990) who stated that this value chain analysis is able to provide information on which industry link is the most valuable of a supply chain management. In addition, value chain analysis also provides information about the critical point of the respective parts of

the supply chain.

The most important link is the fulfillment of customer satisfaction associated with Customer Relationship Management. In this aspect, the Customer Relationship Management Management known as CRM will specifically address the handling of the relationship between problems with its Tofu Tempe industry customers with the goal of increasing value in the eyes of its customers. Another term is the management of CRM (Customer Relationship Management) information systems known as planning, scheduling, and controlling pre-sales and post-sales activities within an organization (Kalakota, 1999).

SCM and CRM

In the small to medium-sized Enterprises of tempe-tofu in Lamper Tengah the main activities included in the SCM classification are processes where the product is still raw, semi-finished and finished products are obtained, modified and sold through various facilities connected by the chain along the flow of products and materials . Described in the form of a chart under the SCM process is almost always in conjunction with CRM, it is associated with some of the available Profit Opportunities as well as the opportunity lost in a SCM - CRM cycle in a business.
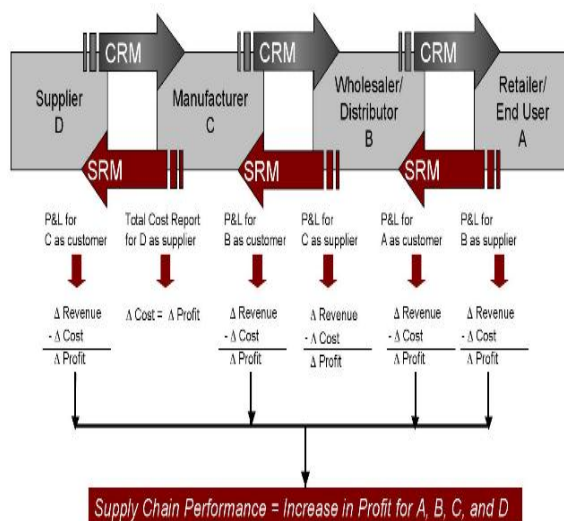

Figure 3

There are two arrows that determine the two main functions of the SCM cycle that guide the calculation of Profit in each phase. If seen arrow is the function value [CRM] / value of service that is Customer Relationship (CR) is created from Supplier (D) start to the lowest retail network / End User. While the arrow [SRM] direction is the value of the process of Supply Chain (SC) generated from the bottom Retail Network / End User who return to Supplier (D)

This is similar to the one depicted in Figure 1 that illustrates how the risks taken by Tempe-Tofu producers do not get the maximum margin but customers do not switch to other Tempe-Tofu manufacturers. Tempe Tofu entrepreneurs have to speculate to play the most difficult way and strategy if they have to deal with the Tempe-Tofu industries that have big capital. However, if the allocation of high cost raw materials is still purchased it means that service expectations to customers are not interrupted and the existing market remains well established but small and medium Enterprises have the risk of losing significant margins.

SCM is always associated with the importance of CRM. CRM emphasizes that customer affects the company's profitability because it is more efficient to maintain CRM emphasizes that customer retention affects the company's profitability because it is more efficient to maintain an existing customer relationship than create a new one. Also, customer Relationship Management (CRM) systems can help organizations manage customer interactions more effectively.

CRM is based on the principles of Relationship Management (RM) which is regarded as one of the key areas of marketing and has generated

4

great research interest (Sheth, 2000). Others propose that RM is concerned with relationships with multiple stakeholders, while the focus of customer relationship management should be primarily on the customer. The above definition of CRM captures the essence of present day management mantra, SCM too. It says, CRM is meant for a common cause of business and their customers, which is also the understanding that the concept SCM focuses on. In order to link the customer with the supplier, it networks the various players and using the tools for managing the information and products, it tries to achieve the goal of customer satisfaction. As such, the concept of CRM is hand in glove with the dimentions that go well with SCM based management dimentions. CRM calls for capturing pertinent data about the prospective and current customers in respect of their buying pattern, shopping behaviour and usage habits of the products and services and to use the information to commence a two-way dialogue with them. That means, the essence of CRM is customer and continuity, and it goes well with the goals of Supply Chain Management.

RECEARCH METODOLOGY

This research is a qualitative study of supply chain system currently used in Small Medium Enterprises Tempe Tofu in Lamper Tengah. The research method used is qualitative research with types, data sources, and Techniques Data collection is taken from data collected from two types namely primary data and secondary data. Samples were obtained from 18 Tempe - tofu SME's in Lamper Tengah.

Informants in this study are Tempe-tofu SME's owners. Using qualitative research method in SCM provide the opportunity to identify and explain complex relationships without having to pre-specify either the variables involved, or the nature of the relationship between

them.

The researcher will develop more
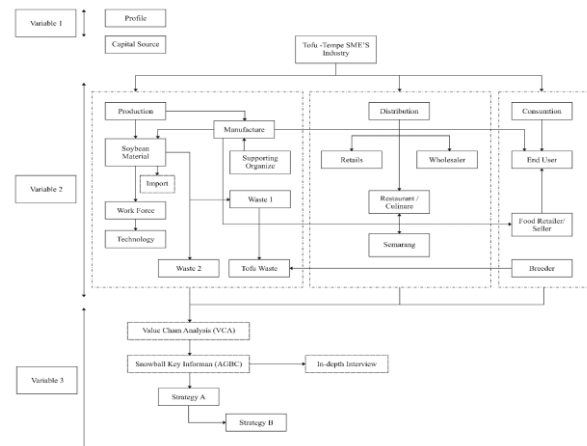
understanding of the phenomena under investigation deeply in the problem thruogh using different data collection techniques available.

The framework for this research is developed below at figure 4

DATA ANALYZE AND RESULTS

A. Identifikasi Supply Chain (SC) dan Customer Relation (CR) UKM

From the interview result it is known that the supply chain system used is still in close partnership with the suppliers (suppliers). This is because the supply chain system has low cost and efficient for small and medium scale business category. Of the 15 Small and Medium Enterprises sampled, the informants had the same response using a close partnership with suppliers and using 1-2 suppliers. Most supply chain systems with close partnership system methods are culinary Enterprises. While for Material Raw Materials still rely on Importers from USA and Local suppliers.

SMEs are explained on theoretically existing SCM methods, ie partnerships with suppliers, close consumer partnerships, JIT Supply Systems, e-procurement, Electronic Data

Interchange (EDI), outsourcing, subcontractor / subcontracting, Third Party Logistics / 3PL, strategic planning, multiple suppliers, multiple suppliers, Safety stock) and the use of external consultants, but from the results of discussions and interviews with informants, they prefer to use simple methods it is intended to save costs due to high transportation costs and no supporting technology systems.

Management of Customer Relationship Management Small and medium Enterprises Tempe Tofu does not have any concept of handling with both model and system info Rmation of integrated CRM (Customer Relationship Management) management. This is associated with the real condition of customers who do not need modernist handling due to the burden of large costs when applied in the business system

B. Identification Value Chain and Profit analyze

1. (Model 1 Supplier - Manufaktur – consumer)

The first supply chain management model that SMEs only use 1 supplier then do the manufacturing process by making the product and directly sell it to the consumer.

From the calculation is known that in the production process know, the costs incurred include the cost of raw materials and processing costs. The cost of raw materials is the purchase of soybean amounting to Idr 12,266.67 per Kg. The processing costs consist of grinding, boiling and labor cost of Idr 658.57 per kg, Idr 987.28 per kg and Idr 465.86 per kg respectively. The biggest cost is the boiling cost. Boiling porridge knows to use a boiler with a wood-burning fuel of choice which in the production process is constantly needed. The price at consumer level in marketing channel I is Idr 12,166.67 per Kg and total marketing

margin is Idr 1.314,29 per Kg, so it can be known that farmer's share is 96.15%. Farmer's share of 96.15% indicates that marketing channels know on channel I is efficient.

2. (Model 2 Suplier - Manufaktur – Retailer – Consumer)

The second supply chain management model that SMEs use 2 suppliers then performs the manufacturing process by making the product and directly selling it to the consumer or selling it to the new retailer to the consumer.

From Calculation Model II this value chain begins first from the retailer, know directly marketed to consumers. In the manufacture of tofu, manufacturers expend costs. These costs include the cost of raw materials and processing costs. The cost of raw materials is the purchase of soybean amounting to Idr 8,735.71 per kg and the processing costs consist of grinding, boiling and labor cost of Idr 654.22 per kg, Idr 659.12 per kg and Idr 987.86 per kg. The biggest processing cost is the boiling cost. In this channel, the retailer purchasing price from producer is Idr 13,076,53 per Kg and the retailer earns Idr 987,09 per kg. Costs incurred by retailers to market tofu are transportation cost, packaging and retribution cost of Idr 502,87 per kg, Idr 981,12 per kg and Idr 350,00 per kg respectively. The price at consumer level on marketing channel II is Idr 12,280.61 per Kg and total marketing margin is Idr 1,872.70 per Kg, so it can be known that farmer's share is 84.81% .Farmer's share of 84.81% indicates that marketing channel Know on channel II is economically efficient. .

3. (Model 3 Suplier - Manufaktur - Agency - Retailer – Consumer).

The third supply chain management model that SMEs use 3 suppliers then does the manufacturing process by making the product and directly selling it to the consumer or selling it to the agent, then to the new retailer to the consumer.

From the calculation of Model III,

the costs incurred in the production process know, among others, the cost of raw materials, namely the purchase of soybean amounting to Idr 14,423.08 per kg and the processing costs consist of grinding, boiling and labor cost of Idr 506.79 per each Kg, Idr 2,150.02 per kg and Idr 1142.86 per kg. The biggest cost is the boiling cost. Boiling porridge knows to use a boiler with the choice of wood fuel in the production process is constantly needed.

The price at the level of out-of-town traders in marketing channel III amounted to Idr 10,401.10 per kg and total marketing margin of Idr 1,298.35 per kg, so that it can be known that farmer's share is 86.19%. Farmer's share on channel III is the lowest farmer's share compared to the other two channels. Farmer's share of 86.19% indicates that marketing channel III is economically efficient.

The Resume Calculation

Discription	I	II	III
Total Marjin (%)	3,85	15,19	13,81
Total Marketing Cost (Idr)	-	536,99	148,35
Total Profit (Idr)	1.314,29	1.872,71	2.150,00
Farmer's Share (%)	96,15	84,81	86,19

The table 3 above Farmer's share in marketing channel I of 96.15%, marketing channel II of 84.81% and marketing channel III of 86.19% and all above 50% said to be very efficient. Farmer's share found in marketing channel I is the highest share farmer's share compared to other marketing channels. This shows that marketing channel I is the most efficient to market

tofu.

C. Developing a strategy of strengthening and development of business performance.

Based on the problems and the pattern of development of small and medium business of Tempe Tofu business in Lamper Tengah shows the existence of extraordinary potential for further development so that in this research will be concluded in the formation of strategy made based on collaboration entity between elements arranged in two main strategy in collaboration that is :

a. *Cluster collaboration in one industry strategy:*

This strategy shows the connectedness of business in the same cluster that is geographically adjacent and complementary. Small and Medium Business Clusters Tempe knows can work together in the supply of raw materials and specific inputs, or expansion downstream to the market or to the exporters. The strategy also requires government agencies, business associations, service providers, Bank and other institutions that support cluster companies, in areas such as vocational training or research. It is expected that this Strategy will be able to increase the partnership between small and medium Enterprises in one cluster in managing 2 kinds of vertical linkages: future linkages and backward linkages. The future linkage is a link between the main industry and its downstream industries, while the backward link is the link between the main industry and the upstream industry. Examples of what has now been built is a collaboration between the Tempe Tofu industry with timber craftsmen who have the same raw material needs of wood by ordering them together to obtain cheap wood prices..

b. *Collaboration in one knowledge management Strategy:*

This collaboration exists to create added value of every small and

medium business in improving the ability of both hardskill and softskill. Based on previous observations there are some things that are not known much about the information system Supply Chain and Customer Relationship Limited knowledge of small and medium business owners know tempe about JIT Supply Systems, e-procurement, Electronic Data Interchange (EDI), outsourcing, subcontractor / subcontracting, Third Party Logistics / 3PL, strategic planning, Supply chain benchmarking, vertical integration, multiple suppliers, multiple suppliers, Safety stock), on demand and customer related markets, product innovation, raw materials, suppliers, and manufacturing process . As well as basic handling of customer knowledge.

Figure 5.
The parties involved in the collaboration can be illustrated in the following illustrationn
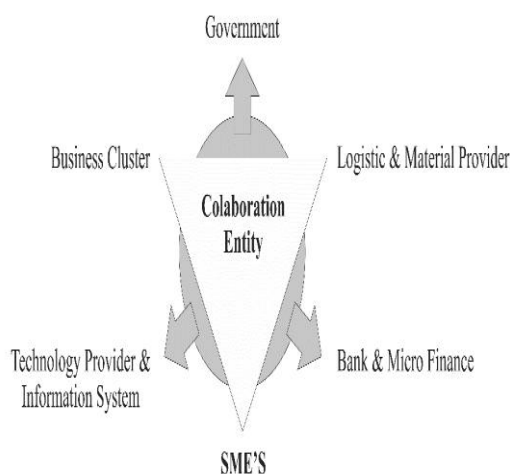
CONCLUSION

1. There are three patterns of value chain (value chain) in Small and Medium Enterprises Tempe Tofu Lamper Tengah An efficient value chain is a value chain where Manufacturers know to get the Highest Farmer Share to run a marketing function.

2. Factor factors that become a driver in the value chain of Small and Medium Enterprises is a family factor in berkolabroasi that makes the motivation to increase production capacity. The inhibiting factor is the uneconomical scale of business, bargaining position with the suppliers who are still weak

3. The characteristics of SMEs in general are 1) in the supply of raw materials of their products obtained from Import 2) SMEs have potential cooperation with SMEs in their industrial clusters in the provision of main raw materials, 3) knowledge of product making inherited from family members or neighbors, 4) collaboration Depending on the model / type of business being undertaken.

4. Creation of collaborative produce is a collaborative model SRM and CRM of SMEs can be the foundation in establishing the SME supply chain collaboration management framework.

REFERENCES

Chopra, S., and Meindl, P (2001), *Supply Chain Management: Strategy, Planning and Operations.* New Jersey - Prentice Hall

Hamisi (2010). Challenges and opportunities of Tanzanian SMEs in adapting supply chain management. African Journal Business Of Management., 5(4); 12661276

Kalakota Dan Whinston, Frontiers Of Electronic Commerce, Addison-Wesley Publilshing Company, Inc, Massachusetts, 1996.

Moore KA (2008), Valaue Mapping Framework Involving Stakeholders For Supply Chain Improvement When Implementing Information Technologies Projects. Ph.D Thesis, M.S. University of central Florida, 194p

Ntayi, j.M., G. rooks and S Eyaa, 2010, Collaborative Relationship,

procurement Practices and Supply Chain Performance: The Case of Small Medium Entreprises in Uganda. In: Sonny, N, and AAllam (Eds), African Entrepreneuship in Global Contexts: Entreprise Solutions for Sustainable Development, Worls Sustainable, London, Chapter 7

Porter, Michael E. Competitive Strategy; Techniques for Analyzing Industries and Competitors. 1980. Free Press. Boston

Schroeder, Roger G (2000). Operation Management. MC Grow Hill Companies, United States of America.

Sheikh K. 2002. Manufacturing Resource Planning (MIDR II), with Introduction to EIDR, SCM and CRM. Mc Graw Hill, Singapore.

Stoner, James A, F (2006), " Management Englewood Cliffs . NT Prentice Hall Inc

Tambunan, T (2005), "Promoting Small Medium Enterprises with Clustering Approach: A Policy Experience from Indonesia", Journal of Small Business Management, Vol. 43 No. 2, pp 138-154