

Analysis of Supply Chain Network of FBS Production in Small and Medium Textile and Textile Product (TTP) Industry

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Abstract. Textile and textile product industries are one of prioritized industries to be developed for its strategic roles in national economy, e.g. contributing to foreign exchange, absorbing a large number of labours, and serving to meet national clothing need. TTP industry has a relatively complex supply chain. Problems in supply chain in companies implementing supply-chain management (SCM) that may occur, among others, are those related to supply-chain mapping. This SCM is used to carry out monitoring, controlling, and identifying position of an organization relative to its competitor and to objectives that they want to achieve. One of companies engaging in TTP industry is FBS Small and Medium Industry (SMI) owned by Mr. Rico since 2004. The company is a make-to-stock manufacturer which produce boys clothing ranging from jeans, t-shirts, to shirts. We conducted interview with experts in the company. Data was collected from the interview with the experts (CEO of the company and his reliable assistant). Based on discussion of FBS SMI supply-chain, it was concluded that basically the flow from suppliers to consumers was same in each production area. Raw materials are transferred from Kebayoran Headquarter to each production areas spread across Java Island, e.g. Jakarta, Pandeglang, Central Java, and Sukabumi, with different CMTs. It is expected that supply-chain mapping analysis of this company is able to clarify the flow of production from raw materials to finished goods reached by consumers.

Keywords: supply-chain management, TTP industry, CMTs

1. Introduction

Textile and textile product (TTP) industries are one of prioritized industries to be developed for its strategic roles in national economy, e.g. contributing to foreign exchange, absorbing a large number of labours, and serving to meet national clothing need. TTP industry has a relatively complex supply chain. Problems in supply chain in companies implementing SCM that may occur, among others, are those related to supply-chain mapping. This supply-chain management system is used to carry out monitoring, controlling, and identifying position of an organization relative to its competitor as well as to objectives that they want to achieve. One of companies engaging in TTP industry is FBS Small and Medium Industry (SMI) owned by Mr. Rico since 2004.



2. Methods

The first step carried out in this research was observation and literature study. Observation is conducted at FBS Headquarters at Kebayoran, South Jakarta. At there, we saw varieties of products, the processes from start (raw material) to end (finish goods/FG), the places for production, the beginning business story starts and introduced directly by the owner, And study author do research on all aspects required in research. Followed by the second step, e.g. identification of problems arising in supply-chain management of FBS Small and Medium Industry. Subsequently, problem statements were composed. Data was collected from raw material suppliers, production areas, CMT, and retails of the FBS SMI. The data is from the owner, Mr. Rico and his right-hand man, Mr. Mukhlas. Data processing was performed to the collected data by mapping out supply-chain of the FBS SMI. Data analysis was done to the results obtained from data processing which is mapping out supply-chain of the FBS SMI production areas such as Jakarta, Sukabumi, Pandeglang and Central Java. In the final step, conclusion was drawn from the analysis and discussion of the results.

3. Results and Discussion

3.1. Supply-Chain Management (SCM) Network of FBS Small and Medium Industry

In order to map out supply-chain flow of FBS SMI, we started by conducting interview with experts from the company. Results of this interview showed list of suppliers, production areas, the CMT, and stores or retails where the products are being sold, e.g. Tanah Abang Market Block A.

3.2. List of Suppliers of FBS SMI

- Mandiri Sukses
- HN
- Putra Nagatama
- PD Naga Sakti
- Kualitas Super Tekstil Pty Ltd

3.3. List of Suppliers and CMT

Table 1. Production areas and CMT

Production Areas	CMT	Production Areas	CMT
Jakarta	Joglo	Sukabumi	Sukamaju
	Cipadu		Padabeunghar
	Petukangan		Parakanlima
	Grogol		Narogong
Pandeglang	Petir	Pasir Batok	
	Baros	Bojong Waru	
	Cibokor Nanggor	Ciherang	
	Cibuah	Ciguyang	
Central Java	Pemalang		
	Purbalingga		

3.4. Outline of Supply-Chain Network from Supplier to Consumer

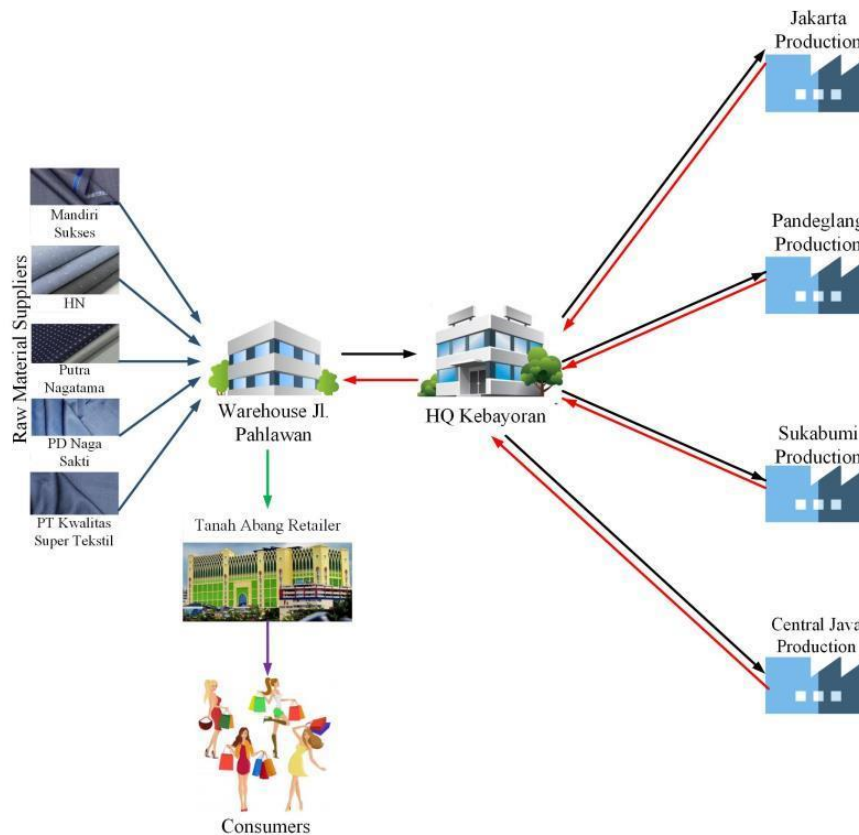


Figure 1. Outline of Supply-Chain Network of FBS SMI

The leftmost part of Figure 1 above shows the list of cloth suppliers of FBS SMI. Clothes from these suppliers are sent to a warehouse at Jl. Pahlawan where raw materials of FBS factory are stored. After being received in the warehouse at Jl. Pahlawan, the raw materials are sent to Headquarter at Kebayoran for cutting. The raw materials are then divided into particular amounts before being picked up by their production (dressmaking) places of children clothes which are located in different areas, e.g. Jakarta, Pandeglang, Sukabumi, and Central Java. The finished goods are sent back to Kebayoran for quality control (QC). After passing QC process, the finished goods are returned to the warehouse at Jl. Pahlawan for laundry and ironing (finishing), followed by packing. Once the packing is done, the FGs are distributed immediately to stores/retails of FBS at Tanah Abang Market Block A where consumers purchase them.

3.5. Mapping of Supply-Chain Network at Jakarta Production Area

The leftmost part of Figure 2 above shows the list of cloth suppliers of FBS SMI. Cloths from these suppliers are sent to a warehouse at Jl. Pahlawan where raw materials of FBS factory are stored. After being received in the warehouse at Jl. Pahlawan, the raw materials are sent to Headquarter at Kebayoran for cutting. The raw materials are then divided into particular amounts before being picked up by their production (dressmaking) places of children clothes which are located in four different places of Cut, Make and Trim (CMT) in Jakarta, e.g. Cipadu CMT, Grogol CMT, Petukangan CMT, and Joglo CMT. The FGs are sent back to Kebayoran for quality control (QC). After passing QC process, the FGs are returned to the warehouse at Jl. Pahlawan for laundry and ironing (finishing), followed by packing. Once the packing is done, the FGs are distributed immediately to stores/retails of FBS at Tanah Abang Market Block A where consumers purchase them.

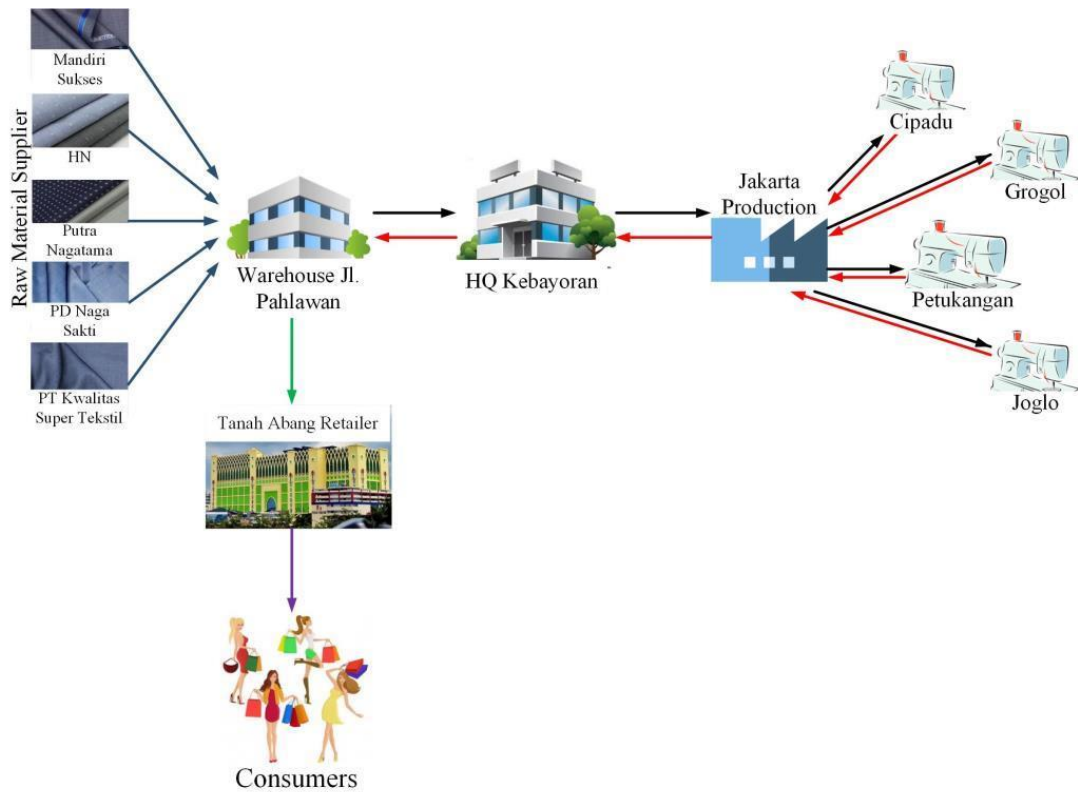


Figure 2. Supply-Chain Network at Jakarta Production Area

3.6. Mapping of Supply-Chain Network in Pandeglang Production Area

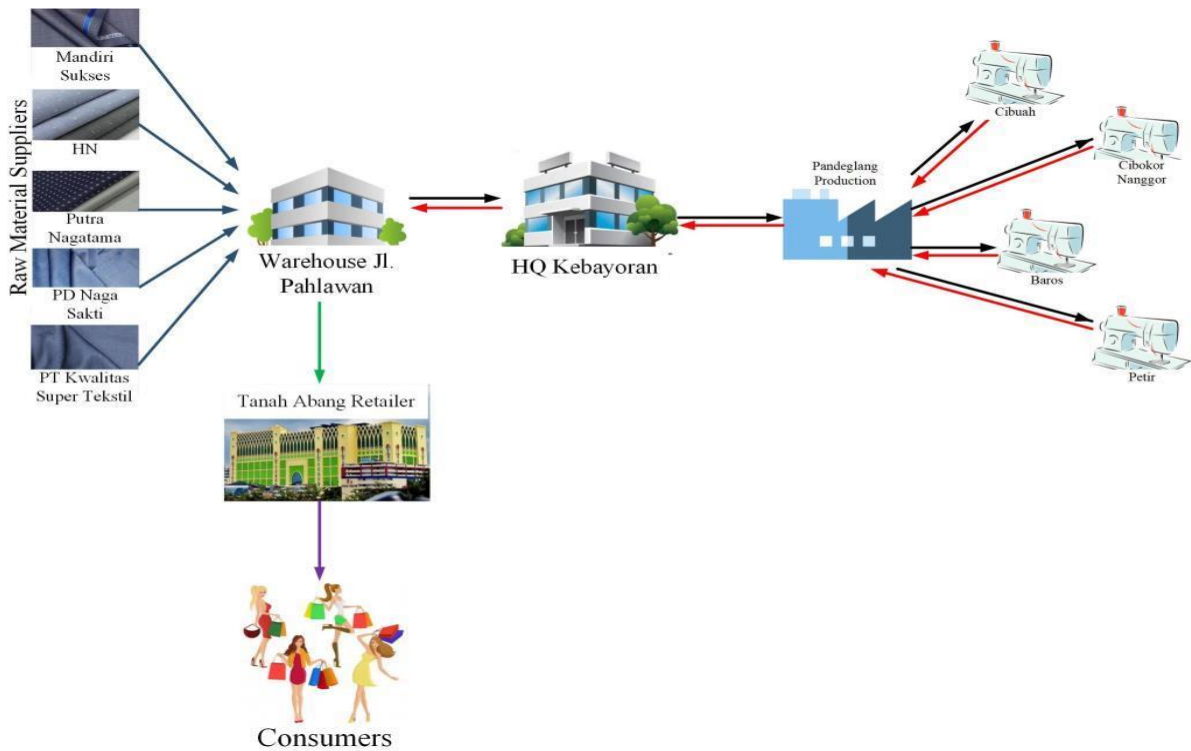


Figure 3. Supply-Chain Network in Pandeglang Production Area

The leftmost part of Figure 3 above shows the list of cloth suppliers of FBS SMI. Cloths from these suppliers are sent to a warehouse at Jl. Pahlawan where raw materials of FBS factory are stored. After being received in the warehouse at Jl. Pahlawan, the raw materials are sent to Headquarter at Kebayoran for cutting. The raw materials are then divided into particular amounts before being picked up by their production (dressmaking) places of children clothes which are located in four different places of CMT in Pandeglang, e.g. Petir CMT, Baros CMT, Cibuah CMT, and Cibokor Naggor CMT. The FGs are sent back to Kebayoran for quality control (QC). After passing QC process, the FGs are returned to the warehouse at Jl. Pahlawan for laundry and ironing (finishing), followed by packing. Once the packing is done, the FGs are distributed immediately to stores/retails of FBS at Tanah Abang Market Block A where consumers purchase them.

3.7. Mapping of Supply-Chain Network in Sukabumi Production Area

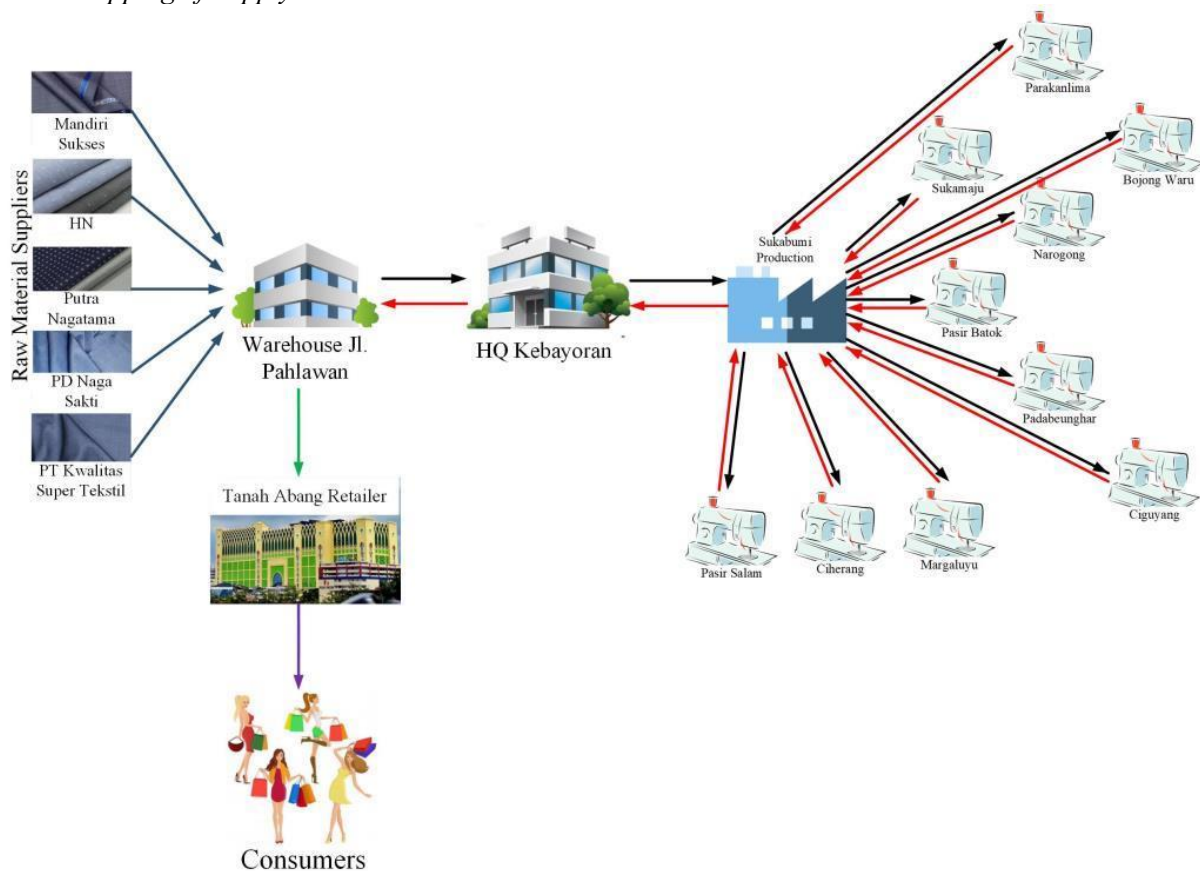


Figure 4. Supply-Chain Network in Sukabumi Production Area

The leftmost part of Figure 4 above shows the list of cloth suppliers of FBS SMI. Cloths from these suppliers are sent to a warehouse at Jl. Pahlawan where raw materials of FBS factory are stored. After being received in the warehouse at Jl. Pahlawan, the raw materials are sent to Headquarter at Kebayoran for cutting. The raw materials are then divided into particular amounts before being picked up by their production (dressmaking) places of children clothes which are located in ten different places of CMT in Sukabumi, e.g. Parakanlima CMT, Sukamaju CMT, Bojong Waru CMT, Narogong CMT, Pasir Batok CMT, Padabeunghar CMT, Ciguyang CMT, Margaluyu CMT, Ciherang CMT, and Pasir Salam CMT. The FGs are sent back to Kebayoran for quality control (QC). After passing QC process, the FGs are returned to the warehouse at Jl. Pahlawan for laundry and ironing (finishing), followed by packing. Once the packing is done, the FGs are distributed immediately to stores/retails of FBS at Tanah Abang Market Block A where consumers purchase them.

4. Conclusion

Based on discussion of supply-chain management of FBS SMI above, it is concluded that basically the flow from suppliers to consumers was same in each production area. Raw materials are transferred from Kebayoran Headquarter to each production areas spread across Java Island, e.g. Jakarta, Pandeglang, Central Java, and Sukabumi, with different CMTs. It is expected that supply-chain mapping analysis of this company is able to clarify the flow of production from raw materials to finished goods reached by consumers.

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