

How to Improve Service Quality and Cost Efficiency by Changing A Logistics Strategy

Case company: Viet Kim Sai Gon Trading Co., Ltd.

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Abstract <p>Insufficiently distributing resources would put companies in a risk of decreasing in service quality which may worsen the business competitiveness in short term and sustainably harm the company development ability. In fact, the major of Vietnamese SMEs usually spent insufficient effort when they are facing a make or buy decision, which often led to ineffectiveness in operating, result in failure to deliver the real value which they were capable to provide.</p> <p>In this research, a case of a Vietnamese company names Viet Kim was studied. This was a fabric trading company who import containers of fabric rolls from manufacturers in China to consume in Vietnamese market to make profit. The two logistical activities of the company which were warehousing and delivery, would be re-assessed to find out if the current operating methods had met the required service quality and financially effective.</p> <p>The current process and quality of the two activities were described based on author's observation during the time he worked there as a warehouse assistant following by quality analysis using SWOT method.</p> <p>In the result, recommendation for alternatives was suggested to the company in order to help improve their service quality by well distributing their resources. The alternative does not affect the current procedure of the two mentioned activities, but simply replace the parties who operate the tasks.</p>		
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1 Introduction

Effectively distributing enterprise resources is one of the most common challenges for startups and organizations which are in their early development state. The challenge presents when companies need to make their strategic decision on choosing whether to establish and run their own functioning division that serves the business or to outsource the service from an external provider.

According to Dobler and Burt (1996, 192 – 201), insourcing allows a company to be more active in controlling its product when outsourcing gives that company chances to take advantages of more progressive resources and abilities of various available suppliers. On the other hand, this is not a one-time decision for companies, especially for new growing organizations since they are compulsory to continuously change. And whenever a wrong decision is made, not only the benefits of the other will be missed, but also the ineffective way of utilizing enterprise resource might waste that company a remarkable amount of time and effort, which leads to increases in the final products cost and even hidden costs.

Consequently, company might face a risk of losing customers to competitors since according to Harrison, Hoek and Skipworth (2014, 18), typical competing methods are to present the end-customer leading positions in relation to the quality of the product itself and the attached services and/or the price coming with it. Therefore, companies may need to spend more effort considering all the related factors before making this impactful decision in exchange for a sustainable growth.

1.1 Objectives

Logistics management supports companies in eliminating wastes and improving customer service quality through the arrangement, manipulation and implementation of the effective flow and storage of information, goods and services from beginning to end point (Ghoumrassi & Tigu 2017).

The author had been working for Viet Kim company as a logistics assistant for four months. During the working period, many issues had been approached regarding the logistics activities. Therefore, the author was motivated to commit to this study

which is meant to be an improvement suggestion for the company. Despite Viet Nam has adapted a certain number of international standards, there are some typical differences regarding to local working styles, distinguished national culture and other hidden factors which make it slightly challenging to apply book-based theories in this research.

The aim of this study is to address the problems in logistics activities and then to form a solution of cost-effectively improving the general logistics performance. In this case of Viet Kim company, Warehousing & Delivery department is zoned to proceed the study since its services are currently taking responsibility for most of the logistics performance of the firm.

1.2 Research Questions

This Thesis answers the questions as follow:

What are the reasons of poor quality in logistics procedure and how do they effect this operation in the long term?

In what way and by how much effort should be given to improve the logistics performance without exceeding the total costs?

This Thesis however will skip the solution of improving inventory management. Rather, the Thesis will concentrate on storage and delivery solutions. Therefore, analysis and discussions in this paper will base on strategy choosing perspective.

1.3 Research Method

Qualitative research is applied when there is a phenomenon needed to be identified. Data collected by qualitative methods, which is non-numerical and only acquired from one or a few cases, will be analyzed. And in the result, the phenomenon should be deeply understood, thereby quantitative research shall be then applied to measure the phenomenon (Kananen 2011, 36 - 41)

This research is about addressing the problems existing in an SME company, which makes its logistics activities run inefficiently, and finally gives improvement suggestion to orient the business to its most possible optimized and sustainable condition.

This way of approaching requires the author to collect two types of data which gives information about the current economy situation of the location where this business was taking place and as well as the recent performance of the business itself. Therefore, the author has decided to use qualitative methods in this research.

The process of the thesis begins with basic theories covering the mentioned subjects which are warehousing operations, delivery activity in a firm scale and make or buy decision; following by a data collection of the studied firm. Some of which are acquired by the author observation, interviews with related parties and the other is provided by the logistics manager, Mr. Max Lee. After all data and theoretical basis are indicated, analysis will be proceeded using S.W.O.T methods. Finally, in the conclusion part, suggestion on improvement solutions will be advised.

All the data and information related to Viet Kim company and permission of utilization in this paper was provided by the firm legal representative. However, the data appearing in numbers which is indicated in this thesis was slightly changed based on a certain coefficient.

2 About Viet Kim Trade Co., Ltd.

According to statistics collected by Viet Nam Trade Promotion Agency, Viet Nam imported 791.8 thousand tons of textile in 2015 and 861.4 thousand tons in 2016, in which China was dominated when supplied approximately 40% of the total amount (2017). In that scene, Viet Kim Sai Gon Trading Company was founded in 2017 to play the role of a bridge connecting Chinese textile manufacturers and Vietnamese market. Having two considerable competencies which are accessibility to the large-scaled Chinese textile internet platform with 50 supplier's partnerships till March 2018 and capability of providing a diverse fabric model in a large quantity with in an acceptable lead time, Viet Kim is heading to be one of the suppliers having the most market shares in Ho Chi Minh City.

Particularly, Viet Kim provided four kinds of stocked fabric which are Chiffon, Italian Silk, Kate Cloth and Lining Cloth. The textile is cut precisely in the size of 1.5 m wide and 120 m long before packed in rolls. The fabric is shipped in containers by sea to Sai Gon Port and delivered to Viet Kim warehouse by road at the frequency of one

container (1000 to 1500 fabric rolls) per week. Viet Kim is presently targeting to four groups of clients which are: market traders in two of the most active textile hubs in Ho Chi Minh, which are Tan Binh Market, and Soai Kinh Lam Market; textile manufacturers who currently supply uniforms and formal suits for workers and school students; fashion brands who supply new fashion clothes for Vietnamese consumers; Ao Dai tailors who supply the Vietnamese traditional costumes for teachers, weddings and several other events. Viet Kim organization structure is centralized where Sale & Marketing is the most active department. Figure 1 below describes how Viet Kim organization is formed:

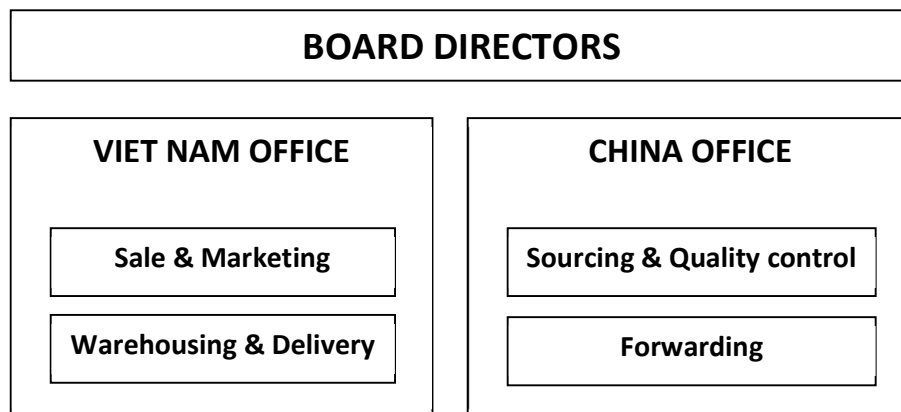


Figure 1 Organization structure, Viet Kim Co., Ltd.

The first four months of Viet Kim fiscal year had experienced a growth in net sale which started with nearly 48,000 EUR in November 2017 and merely reached 120,000 EUR in February thanks to the sharply increasing demands of Lunar's New Year occasion. Figure 2 below indicates the company growth in sales on the mentioned period.



Figure 2 Sale result from Nov 2017 to Feb 2018, Viet Kim Co., Ltd., Sale department.

After gaining a growth in sale, the company noticed that they need to make the lead time shorter so that they could bring more satisfaction and serve more client. In March 2018, Viet Kim rented a warehouse space located in District 6 which is 22 km from Cat Lai Port and 12 km from Sai Gon Port. The storage maximum capacity is 1500 fabric rolls, which can fulfill the firm market share in 10 days. In addition, in order to response to customer demands faster within less effort given, Viet Kim's sale department has applied an order-to-delivery process as indicated in Figure 3 below:

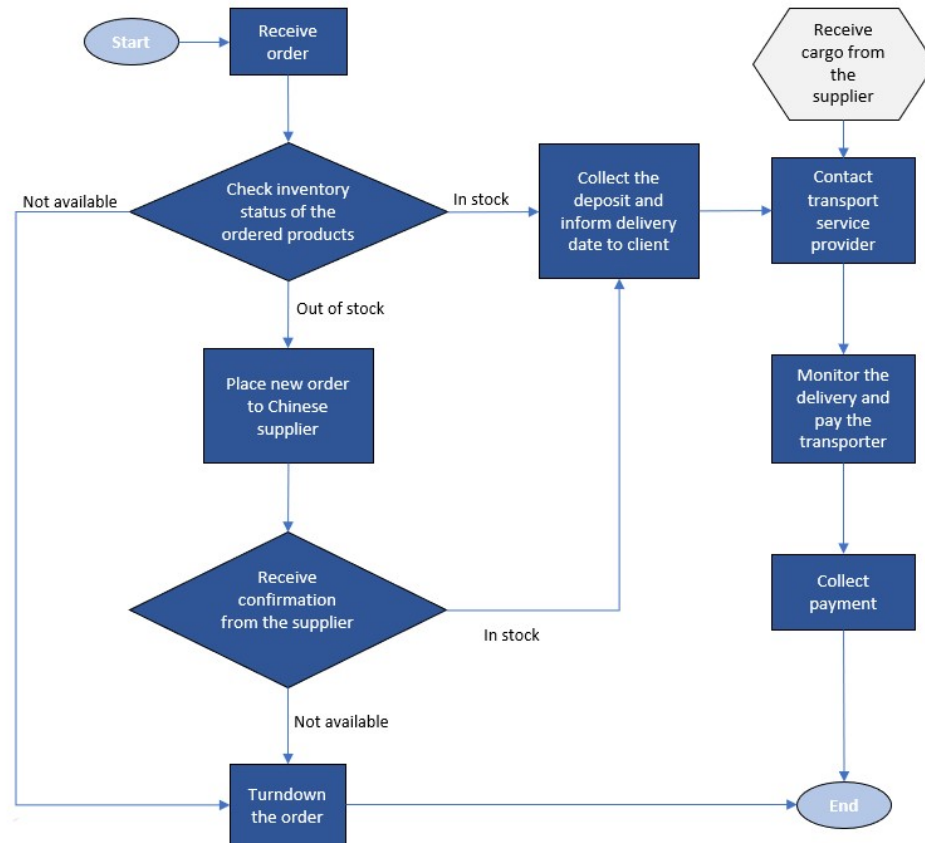


Figure 3 Order-to-deliver process, Viet Kim Co., Ltd., Sale department

3 Warehouse Operations

3.1 Warehousing in General

A warehouse is a prepared space which is used for storing and handling goods/materials purposes (Emmett 2005, 5). According to Frazelle (2001, 2), it can be divided into seven types of warehouse based on the value-added warehousing perspective, which are: Raw material and component warehouses which store raw material fed to manufacturing or assembly process; Work-in-process warehouses which store semi-finished products; Finished goods warehouses which store finished products used to

balance and buffer the difference between demand and production schedules; Distribution centers which are used as hubs where different products from different firm are combined in shipments sent to common customers; Fulfillment warehouses which store small shipments for individual customers; Local warehouses which allow rapid response to local demand by shortening transportation distances; Value-added service warehouses where key product customization activities such as packaging, labeling, marking, pricing and returns processing take place.

Warehousing has become one of the most essential management categories in production industry in this era because of its role in supply chain management which is responsible for delivering products efficiently to its customers. And “efficiently” in this case means that the products should be delivered on time, damage-free, in the correct quantity, to the right customers, at the right place and at the right price economically and environmentally, which can be partly done by optimizing all the warehouse activities (Richards 2017, 8).

3.2 Requirements for Fabric Storage

Fabric (or textile) is defined as cloth created artificially by combining fibers of cotton and/or nylon and/or wool and/or silk and/or other materials. Fabric is a raw material which is used in manufacturing clothes, sheets and curtains (Fabric definition and meaning | Collins English Dictionary n.d.). According to Dufresne invention (2007) Finished products of fabric are cut precisely in a standard width and rolled longitudinally before being packed in polymeric bags. Despite being bagged securely, fabric however attracts rodents, insects and microbes as well as catches fire very easily. Therefore, storing the material is in some way a challenging work not only because its special characteristic but also fabric is one of the most valuable material.

According to Queree & Fone (2009), in order to maintain the quality of fabric, it should be kept in a storage satisfying the conditions as below:

1. *Fabric should be stored in low light level warehouses. In fact, it is recommended to keep the light level at 50 lux to avoid fading, bleaching, dryness and brittleness causing to the material.*

2. *Fabric should be stored in clean and airy places which is isolated from insects and rodents. Keeping the material from moist, dust and other destroyers is also necessary to prevent textile from damages.*
3. *Fabric should be handled as carefully and gently as possible. In fact, it is recommended to handle fabric as little as possible to avoid stretching or even tearing the material.*
4. *Fabric should be kept distances away from potential fire sources such as electric wires, electrical devices. In addition, the warehouse place must comply the fire protection standard.*

Moreover, in order to complete the warehouse operation in a company scale, there should be labeling systems, handling equipment and warehouse personnel acquired and arranged. First, the fabric rolls should be labeled by ingredients, colors, sizes, seller information attached with using and maintenance notices. The labeling procedure should be done flawlessly to minimize mishandling cases which is considered to be bad service quality. Second, the warehouse should be furnished with suitable handling equipment such as specialized trolleys, picking ladders and fiber density inspector, etc. Finally, there should be a team responsible for all the warehousing activities to keep everything under control.

In conclusion, a textile warehouse should be prepared comprehensively including storing conditions, which contributes to the quality maintaining of the products and operating platform, which support the handling procedure. Regardless the scale of organization, any fabric warehouse should comply those requirements in order to be capable of deliver the products efficiently to its customers.

3.3 Costs of Warehousing

Generally, the cost of warehousing is between 1% to 5% of the total cost of products sold in average. Warehousing also contributes around 20% to 30% of total logistics expense. Warehouse managers are required to understand all costs and cost drivers related to the warehouse operation as they are responsible for controlling the expense level without losing the optimum of the produced service (Richards 2017, 345).

According to Speh (2009), warehouse costs is divided into four categories: Handling, Storage, Operations administration and General administrative expenses. First, handling includes all those costs related to the movement of goods within warehouse space, which are: the cost of labor used to handle the products, the cost of operating the handling equipment such as lift trucks, trolleys, ladders, conveyors and other handling expenses such as operating supplies, trash disposal, trucks or rail cars detention. Second, storage includes costs associated with facility such as land renting cost or building depreciation, insurance, repairs and maintenance, utility and telecoms costs and local government taxes. This kind of expense exists independently from the warehouse activities. Third, operations administration are expenses of supervision, paperwork staff and information technology application. Fourth, general administrative are expenses of general management, nonoperating staff and general office expenses.

In addition, there are other expenses incurred due to the imperfection of the operation. These costs are also known for costs of bad quality which are fluctuating depended on the professionalism of the organization. However, in some cases it also depends on the factor of luck which is unmanageable.

4 Delivery Activities in a Firm Scale

4.1 Importance of Delivery Service

Delivery is an essential management category of any organization that benefits from tangible products. Delivery is the process of carrying goods from one planned location to another. In business perspective, it is the activity of transporting the ordered products from the company warehouse or any other places at which the products are currently kept to the location assigned by the customer or the consignee. Shipments shall be transported by trucks, trains, ships, airplanes, motorbikes or combinations of those vehicles depends on the voyage geographical feature, travel distance, urgency level and the shipment size.

Delivery activity contributes to the achieving customer satisfaction mission by providing excellence in service quality through constantly developing working performance.

The performance of delivery activity can be monitored and measured using KPIs (Key Performance Indicators) method. The commonly used indicators are the percentage of successful deliveries at the first attempt, the needed operation time/efforts it takes to complete a delivery, the percentage of deliveries that arrive within the time which is promised to the customer beforehand, the number of failures and the average time between failures, etc. (Meier, Lagemann, Morlock & Rathmann 2013, 102). Maintaining these indicators at an acceptable level and continuously striving to improve them are necessary to demonstrate reliability of a firm, which could be one of the considerations that customers have when they are deciding to place the next orders. Besides, keeping the customer satisfied will also lower the risks of losing company reputation, profit and even employees since they are overloaded with pressures from dealing with the customer complaints (Burch 2018).

4.2 Possible Approaches

In order to accomplish delivery tasks, companies have had different approaches to form their operation. In general, there are four common models customized to the particular condition of each company, which are one-trip contracts, delivery partner contracts, periodic lease and independent operation. First, the one-trip contract is the agreement in which the carrier is responsible for only one route. Although the carrier might provide other services for that client in the future, he should be paid either right after the agreement being placed or after finishing the delivery. This model is recommended when the deliveries are unnecessary to be done frequently (under 2 deliveries per month). In some cases, when there are different requirements for each delivery, it is more likely to select this model since terms might be modified for each contract. Moreover, one-trip contract would be a possible solution to maintain the stable workforce when a company faces an unexpected increase in sale.

Second, the delivery partner contract is the agreement in which a third-party business is responsible for providing delivery services for every shipment or some specific products of a company within the agreed period. In this type of arrangement, payment would be settled periodically with a fixed amount or based on the number of successful deliveries, which depends on the terms in the agreed contract. Using this model allows companies to have their deliveries done without struggling controlling

the cashflows. Therefore, this operating type would be an effective selection for companies that have a stably high number of orders.

Third, the periodical renting is the method in which a company rent vehicles with/without drivers for a short duration in order to serve their delivery activities. By this way, companies have the capability to totally manage the delivery activities regardless the vehicle owner working style. However, the renters must handle the fuel fee and other repairing expenses if the damages are caused during the leasing time (maintenance problems excluded). This solution is applicable for companies that have fixed delivery dates, the recipient addresses are in the local area and capability of vehicle and route management. In some cases, this method is an advisable choice if the shipment is highly valuable and/or the secrecy of the trip is required.

Finally, the independent operation is the method in which the company whose shipment need to be delivered also owns the transport vehicles. This operating style require the company using it a sufficient manageability and a good investment plan to exploit maximum the capacity as well as to achieve cost efficiency during the vehicle life span. Comparing to other methods mentioned above, the independent operating style is purely an insourcing decision due to the whole process involve no role of suppliers. Concerning the difficulties, acquiring and managing a vehicle is obviously a challenging work which requires not only significant management efforts and firm's financial capability but also a fine usage strategy so that such given efforts would not be wasted.

Table 1 Effort, costs and risks comparison of the four delivery models

	ONE-TRIP CONTRACT	DELIVERY PARTNER CONTRACT	PERIODICAL RENTING	INDEPENDENT OPERATION
Finding Suppliers	For every shipment	For each product type\area	For each delivery period	Once
Procedure training	For every new contractor	For each product type\area	Once/to each new driver	Once
Vehicle operating responsibilities	None	None	Fuel, reparation for non-maintenance damages	Every operating task

Interfering ability to the delivery process	None	Shipment tracking available	Total controllability of all activities	Total controllability of all activities
Potential risks	Shipment appropriation. Low availability in peak time. Poor quality controllability.	Unprofessional driver. Unexpected contract termination.	Low availability in peak time. Potential expense for reparation.	Potential failures in peak time
Expenditure	Immediate payment for every delivered shipment	Monthly/quarterly payment for the provided service	Leasing fee, fuel fee, driver's salary, possible reparation fee	Investment in the vehicles, every operating cost, driver's fulltime salary, non-working expense, related equipment costs

In the result, this decision depends on a significantly various factors including company affordability, the shipment value, quality of available service providers, etc. Moreover, those operating models can be also combined in different ways as long as the requirement is met. Therefore, all related factors should be analyzed carefully before concluding the selection in order to gain both efficiency and financial benefits.

4.3 Delivery Service Providers in Vietnam

According to the Viet Nam Logistics Report 2017 by the Ministry of Industry and Trade, in the first 10 months, there had been 1189.4 million tons of cargos transported in all kinds of modes, which increases 10% compared to 2016's statistics. And Road Freight Transports accounted for 70% freight transports of the whole industry. Besides, e-commercial market was developing dramatically in 2017, which resulted in a tremendous increase in demands of domestic delivery. Therefore, a significant number of delivery service providers were established to fulfill that massive demand. A few big names worth mentioning were Viettel Post, Saigon Post, Giaohangnhanh, Giaohangtietkiem, etc.

In addition, beside those large-scale companies, there were small-scale organizations and self-employed contractors who had always been contribute to this delivery ser-

vice playground. In fact, this kind of business is still very popular in Viet Nam nowadays. Whenever anyone who needs using this kind of delivery, they just need to contact the contractor via phone, whose phone numbers can be easily found on flyers, painted advertisement on street walls or most of the time on the vehicles of those contractors. However, this kind of service is often unreliable, unprofessional, and in some case illegal for many reasons such as using unqualified transporting vehicle, carrying overloaded cargo, no legitimate business license and in some cases carrying prohibited goods.

However, in general both the spontaneous delivery contractors and the professional service companies have some common weaknesses in service quality, which are poor performance of lead time, unstable availability and high frequency of making mistake. For this reason, making the decision of managing how to operate the delivery process is a challenging task of any seller in Viet Nam.

5 Make or Buy Decision

5.1 The outcome goals

The reason for a make-or-buy decision for an item arising in an operation is that there is a choice between making that item internally using the firm's resources and purchasing it from an external provider. This kind of decision making is usually seen in manufacture companies when they must choose which component, assembly or part in a product's bill of materials needs to be outsourced mostly because of either the unaffordable manufacturing costs or the advantages in quality of which provided by the outsiders.

Practical indications suggest that overall performance of a firm can be improved by applying well forged outsourcing strategies. Outsourcing is acknowledged as an extremely effective mean to mitigate cost and boost performance. By utilizing outsourcing, a firm can benefit from the best external providers and simultaneously re-vamp departments which are considered as cost-inefficient yet difficult to change. Outsourcing also allow a firm to concentrate on its nucleus business (Kumari 2013). In fact, according to Arjan J. (2018, 12), the costs of goods sold may include 60-80 per

cent of purchased parts in cases of industrial business organizations and 10-50 percent for service companies in average. Besides, physical goods are not always the category considered in this decision processing. In other cases, subsystems or services which indirectly contribute to the product's material costs might be as well considered whether to buy or to make. For instance, a manufacturer may decide to rent another manufacturer's factory as its subsystems to produce a category for the finished product instead of buying the same type of items designed and made by others.

In general, there are two levels of analyzing an issue of make-or-buy choosing which are strategic and operational or tactical. The tactical analyzing level is usually done to solve temporary problems that need an immediate solution when the strategic level is more importantly considered if the decision probably affect the firm's future (Dobler & Burt 1996, 191). However, despite the scale of the issue, when there is a make-or-buy consideration, the selected action should contribute in developing and exploiting the firm's core competencies (Hayes & Pisano 2000). Otherwise, imprecise decisions might transform into potential operational failures or limit the ability of providing added values to the customers in the future. To conclude, this decision-making process should be executed thoroughly so that the company's successive operating performance would be secured which facilitate the ability of added value delivering to the customers.

5.2 Considerations supporting the decision

As mentioned in the previous part, a make-or-buy decision by all means should be generated centralizing the firm's core competencies, which requires thorough evaluating and analyzing efforts. In addition, the massive effects on the customer's benefits and more importantly the efficiency of the firm activities after the decision being applied make it even more challenging to do the task. For at least those reasons, the guidance of making the decision based on maximizing the firm's main competitive advantages has been specified into some sets of principle, which have been used by many organizations. In fact, Dobler and Burt (1996) mentioned that a rule of thumb happened to apply in some firms which encourages choosing the outsourcing solu-

tion for their components or subsystems unless either they are the crucially successful factors of the product in both company's and customer's perspectives or it is extremely difficult to find a supplier who is capable or reliable enough to provide the parts or they are best provided by the firm or the primary motives of success concerning the firm's future plan (191-192).

More specifically, a list of considerations influencing firms to make the decision was introduced as a recommendation which is summarized in Table 1 below:

Table 2 Considerations supporting make-or-buy decisions (ibid., 194)

PREFERABLY MADE ITEMS	PREFERABLY BOUGHT ITEMS
Items which cost less to produce than purchase	Items which cost less to purchase than produce
Items need to insource for the integrating plant operations purpose	Items need to outsource for multiple-source policy maintaining purpose
Items of which production utilizes productively excess plant capacity	Items which production capability is limited due to insufficient facilities
Items of which production and/or quality need to control directly	Items of which production and/or quality need no direct control
Items of which design secrecy is required	Items of which required volume is small
Items which are unavailable from reliable sources	Items which require specialized know-how and/or research of suppliers
Items of which production helps to maintain a stable workforce	Items of which production exceeds the current workforce

However, although those principles are reasonable and fittingly applicable for certain cases, in fact, some circumstances required analysis considering various factors regarding the firm's total operation. Therefore, a make-or-buy investigation should consider every potential consequence after including both the predominant drivers and other correlated qualitative factors (ibid., 204).

6 The Study

6.1 Warehouse operation

6.1.1 Viet Kim's Warehouse Condition

Viet Kim main warehouse was established in March 2018. The company decided to rent a warehouse space which is provided by Phu Lam Industrial Trading and Investing Co. JSC. This warehouse ecosystem is located in 154 Ly Chieu Hoang Street, District 6, Ho Chi Minh City, which is 22km from Cat Lai Port, 12km from Sai Gon Port and under 15-minute traveling time from Tan Binh Market and Soai Kinh Lam Textile Market – the two biggest fabric trading hubs in Ho Chi Minh City.

The warehouse is efficiently assessible for different kind of trucks including heavy-duty trucks and 40ft container trucks. The dimensions of the usable space are 30m in length, 7.5m in width and 7m in height which make the maximum capacity to be 3000 rolls of fabric. The warehouse uses selective racking method with 22 three-layer racks which was bought and installed by a local provider. The handling process was totally done manually by part time porters using a picking ladder and products are moved through the warehouse on two trolleys (see Figure 4).



Figure 4 Picking ladder and trolley, Viet Kim Co. Ltd., Logistics department

In addition, the warehouse is also equipped with a desktop computer to create delivery contracts and keeping inventory data, a printer to print clerical document and company product labels and a white note board. The warehouse operation is executed by one fulltime staff who is responsible for planning and operating inbound process and order picking process, plus one manager who would handle all the unusual problems that occurs during the processes. Since a roll of fabric can weigh up to 35 kg, all the handling works such as order picking, loading and unloading must be done by the contract truck drivers and part-time porters.

In order to operate efficiently, the warehouse crew has created the inbound process and outbound process which is indicated in Figure 5 below:

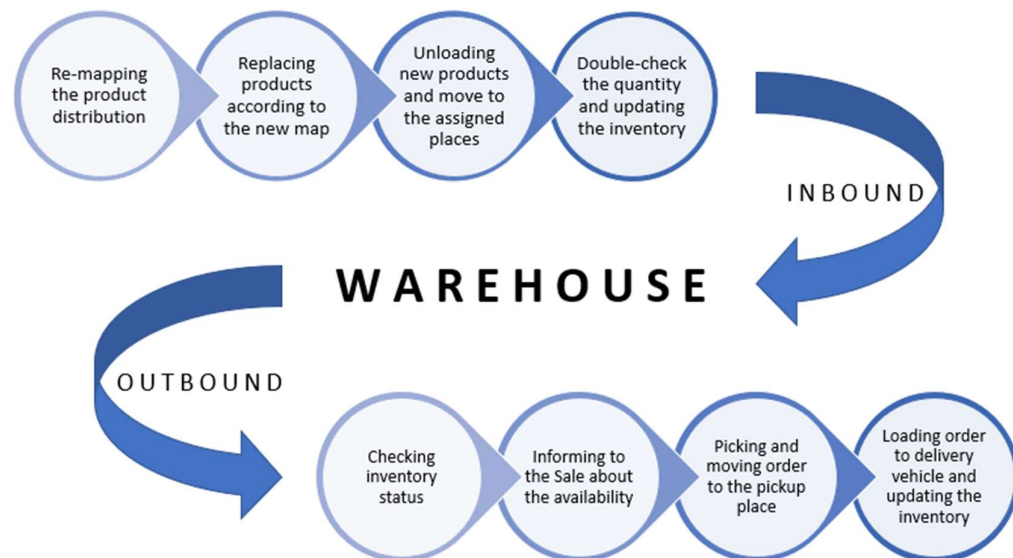


Figure 5 Warehouse process, Viet Kim Co. Ltd., Logistics department

Despite being acceptably configured, the warehouse has a considerably poor condition for storing products, especially fabrics. The majority of products has been interacting with direct sunlight since the main door is always opened during working hour and there is no form of sun blocking available. The concrete floor is usually dirty as it is covered with wastes all the time which makes the air intensely dusty. Moreover,

the wall contacts directly with outdoor atmosphere which transfers humidity into the air inside whenever it rains. As can be seen in figure 6 below, the old ceiling is terribly decayed which would be a danger for the workers and products in case of falling. More seriously, mice have been seen running around the warehouse a couple of times since there are holes on the walls and gaps between doors.



Figure 6 Warehouse condition, Viet Kim Co. Ltd., Logistics department

Furthermore, although the warehouse has been provided two fire extinguishers, its protection and prevention from fire case is considerably poor since there is neither plan of action in case of fire nor any kind of instruction of fire prevention method or evacuation guide. Evidently, the warehouse qualification for storing such a product that is valuable but sensitive like fabric should be carefully reconsidered.

6.1.2 Quality & efficiency assessment

The following assessment is based on aggregation of interview results and observation of the author during his working period at Viet Kim as a logistics assistant. To begin with, the condition of the company warehouse is generally unqualified for fabric storing purpose due to five reasons. First, the fabrics are contacting with direct sunlight too often during the period they are stored in the warehouse. This level of exposure would gradually cause bleaching and staining on the product decreasing it

value. Second, the warehouse space is always dusty, and the floor is always full of trash making the space seriously dirty. This contaminated environment is harmful to either the product or whoever works under it. Third, the surrounding walls have carried a big amount of moistures from outside to the storage whenever it rains. Because of the heavy amount of rain in Ho Chi Minh City during rainy season, the high humidity level in those fabric rolls would potentially be a nutritious environment for the development of mold, eventually ruining the fabric. Forth, even though mice have been found in the storage several times, the manager admit that there would be no effort given to solve this problem, since according to him, the plastic bags used to cover the fabric rolls were strong enough to protect the product against mice. However, later on 2 fabric rolls had been found defected with scratches, which is believed to be caused because of mouse's teeth grinding habit according to the inspector. And fifth, more importantly, fire prevention and evacuation plan are poor, which is not only a risk of damage causing to the product but also a violation to the fire safety law of Viet Nam.

Moreover, there are also problems existing in the handling process, which make it inefficient and time-consuming. In general, those problems involve handling equipment and method. First, the warehouse is equipped with insufficient handling tools and equipment. There are no mean of product protection during the handling process when every handling action are done manually and with picker's barehand. In addition, pickers in the warehouse are mostly truck drivers and part-time porters who have not been trained sufficiently to treat the fabric products the right way. The weigh of one fabric roll variates between 20 kg and 35 kg, therefore in order to lift the rolls, pickers have to use an equivalent amount of hand force, which usually exceeds the endurance limits of the plastic covers and consequently leave deformation on it (tearing, stretching, hole). This damage of the plastic covers would make the product contained inside more vulnerable and easily damaged in the following handling activities.

Table 3 Viet Kim warehouse assessment based on observation and interviews

Requirement/ standards	Viet Kim's warehouse condition
------------------------	--------------------------------

Low light level, avoid direct sunlight	Contact with direct sunlight during operating time
Clean and clear atmosphere	Dirty floor and dusty air
Airy, low moisture level	Wet wall carrying moisture inside
Protected from rodents and insects	Visible mice, mouse footage found on defected product
Qualified fire protection training and equipment	Poorly equipped, no plan for emergency
Sufficient picking/loading equipment	Poorly equipped (1 ladder, 2 trolleys)
Sufficient picking technique	Untrained pickers, visible damage found on product cover after handling

After evaluating the condition of Viet Kim warehouse, the result indicate clearly the necessity of improvement. There are three immediate needs of change which are standardizing fire protection capability, cleansing the storage which is also the working environment and preventing access of mice and other rodents. Those needs are classified as urgent because of the safety and health priority. Although the other issues are harmless to the people working in the warehouse, they need to be solved as soon as possible to ensure the product and service quality of Viet Kim.

6.2 Delivery activity

6.2.1 Viet Kim's Delivery Service

Delivery is the final activity of Viet Kim's order-to-deliver process. The company normally received orders with the requested quantity of 30 to 50 fabric rolls each order, which is equal to 3600 to 6000 fabric meter-length in average. To handle the deliver such quantity, the logistics manager has chosen to use delivery services provided by some self-employed contractors, who were recognized from their ways of advertising described in the previous section. There are regularly two type of vehicles offered by

the contractors which are medium trucks with the maximum capacity of 1.2 tons approximately, and three-wheel motorcycle carts with the maximum capacity of 0.5 tons approximately (see Figure 7).



Figure 7 Two vehicles usually used by Viet Kim delivery contractors

Due to the capacity of the company current warehouse is apparently limited to handle such a dense replenishment frequency of one 40-foot container per week, every order needs to be delivered as soon as its quantity is available in the warehouse. Moreover, the fabric market demand in Ho Chi Minh changes seasonally. For those two mentioned reasons, the logistics department had been facing a challenging issue in arranging drivers for every order sufficiently despite how much the demand might increase. Therefore, the manager came up with a solution for this issue which is improving the availability by simply seeking as many contractors as possible. Information of those drivers such as names, driver license numbers and contact numbers has been filled in a list which have to be updated continuously so that the out-of-driver-situation rate shall be reduced.

This operating method involves temporarily giving company's assets to unreliable outsiders so apparently the delivery trips of every contractors would rather be under company's supervisions. Therefore, in each delivery trip, the company has decided to assign the sale employee whose customer is the consignee of that order to be the

trip supervisor. The task of the supervisors is following the drivers to the agreed destinations and might also collect the payments afterward. In addition, because a delivery trip might include shipments of customers who are the clients of different sale employees, there might be more than one supervisor in one trip. Consequently, the delivery process has been created to keep the involving personnel well instructed while committing the deliveries. The process is fully described in Figure 8 below:

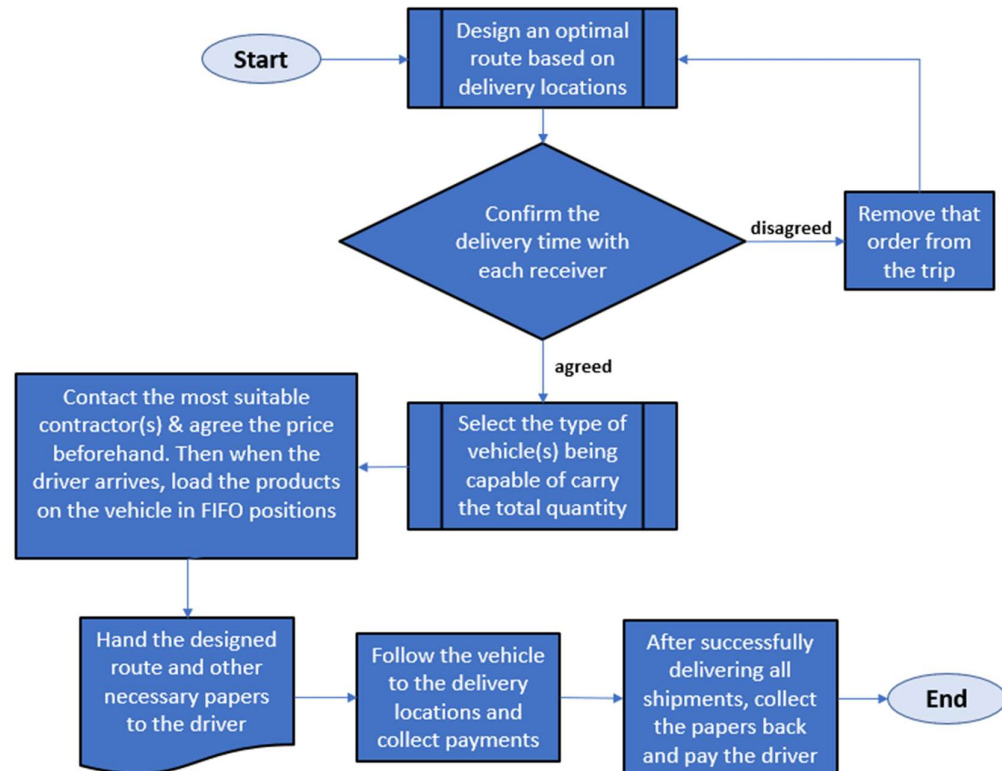


Figure 8 Delivery instruction, Viet Kim Co. Ltd., Logistics department

6.2.2 Quality & efficiency evaluation

The following assessment is based on aggregation of interview results and observation of the author during his working period at Viet Kim as a logistics assistant. To review, Viet Kim delivery activity are done by one-trip contractors. This operation type although can temporarily fulfill Viet Kim's demand, it had showed some weaknesses which cost the company more than the benefit it gave.

The first weakness is related to the working style of the contractors. There were almost no significant problems in the first contracts. However, the drivers have started to use some “tricks” to benefit from the company at the second contracts. For instance, they refuse to name the exact price until they are officially offered the job in order to force the company accept the higher price when it is too late to call another driver. The second weakness is unstable availability, which appeared when the peak season came. In the peak season, it usually takes 3 to 5 hours to find an available driver, which cause delays on delivery and some time followed by cancellations from unsatisfied clients. In fact, one time a client of Viet Kim was informed that her order of approximately 12 000 meters of fabric would delay at least until the next day, she then canceled the order and eventually has stopped buying from Viet Kim again. Viet Kim did not only lose a valuable order that time but also lose the future profit because that customer was one of the most potential customers according to the company customer list. The third weakness is inefficiency because of the supervision procedure which is necessarily applied for this operation type. The problem is that there were no personnel specified for this task, so the sale staffs must become the trip monitor. This way of working took an intensive amount of time of the sale staffs, which should have been spent on their specialized tasks.

7 Conclusions

7.1 Analysis and evaluation

7.1.1 S.W.O.T analysis

S.W.O.T is a combination of the terms Strengths, Weaknesses, Opportunities and Threats which was first used by four Harvard professors in a 1965 publication named “Business policy: Text and Cases”. This is a tool of strategic decision-making for businesses and organization which allows the users to quickly identify their both internal and external factors based on which decisions will be made in the result (Seth 2015, 6-7).

Below table is the S.W.O.T analysis matrix of Viet Kim company:

Table 4 Viet Kim company's S.W.O.T analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> - Abundant resources of fabric from China - One of the most competitive price in the market - Strong-bonded relationships between sale teams and customer 	<ul style="list-style-type: none"> - Product quality after delivery is considerably lower than factory condition - Lead time is unstable, usually longer in peak season - Limited know-how in fabric storing and handling - Under-qualified warehouse condition
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> - Warehouse services with quality facilities and know-how are available in the market - Bargaining power thanks to great purchasing ability - Positively active vehicle and driver market - Remarkably high demands of the market 	<ul style="list-style-type: none"> - Safety risks such as fire cases due to poor quality - Legal responsibility in case causing damages to other's assets and/or well-being - Losing customer to the competitors because of the poor service

7.1.2 General Evaluation

As can be seen in Table 4, both warehousing and delivery processes are facing severe threats. Warehousing process of which quality is lack of protection from environment harms and handling technique increases the risk of accident and product quality decrease. The possible consequence includes loss in either inventory value or time to recover in case of accidents, but more importantly, decreases in liability in the long term due to poor quality products. Delivery process of which availability is unstable and average lead time is considerably uncompetitive also causing liability loss and decrease in total quality in the consequences.

However, as can be seen in those listed opportunities, both of the processes can be replaced by several different alternatives. Current warehouse process can be secured either by investing in facility upgrades, training by warehouse specialists or outsourcing the whole process. In the other hands, for delivery process, there are also more reliable service providers in the market such as Grab, Viettel Post, Giaohangnhanh,

Giaohangtietkiem, etc. which can be all considered as alternatives. In addition, options such as establishing a trained delivery team equipped with their own vehicle are as well considerable.

To conclude, Viet Kim is in a position where the company is obliged to change the way its logistic department performs to keep the service quality competitive in the market, otherwise, they may fail to convince the potential customer to use their services a second time. Fortunately, Viet Kim sufficient resources allows them to afford the changes.

7.2 Suggestion for warehousing solution

Currently, there are two most suitable alternatives for the warehouse process. The company shall consider re-working the whole operation starting with standardizing the storing condition by applying sufficient facility, then establishing a well-trained warehouse crew to improve the handling technique and managing the whole process with sufficient warehouse management program. Otherwise, they shall consider outsourcing the whole process from warehouse service providers which are available in the market. This full warehouse service includes warehouse space which can be customized to the product nature, qualified warehouse crew who have experiences handling the product and a full set of necessary equipment.

However, the first option would take more resources and even get the company more risks to proceed. The company would have to spend a significant effort which is researching for sufficient equipment and solution to re-construct the warehouse as well as the time it would take to establish a well-trained warehouse crew. Moreover, owning a new set of quality equipment which is considerably valuable could raise the risk of depreciation or even damage due to lack of maintenance know-how. Meanwhile, the second alternative in which they would be exploiting resources from a third party, is more efficient because the company only has to pay the rent and merely takes any of the mentioned risks. Therefore, this option was recommended by the author.

7.3 Suggestion for delivery solution

There are as well two available improvement options applicable for the current delivery activity of the company. Outsourcing from more reliable service providers can be considered to alternate the current less effective method. Viet Kim shall sign a contract with a specialized delivery service provider such as Viettel Post, 247 Express, Lala Move, Proship, etc. to establish a long-term service availability. Otherwise, the company shall operate the process by their own by forming a delivery crew with full-time drivers and acquiring/renting a truck. The drivers will be in charge of planning the routes, loading the goods, delivering and scheduling the maintenance works.

In comparison, both options will promise a significant improvement in service quality. However, the first option provides the company less controllability and specialty in fabric handling know-how despite its convenience as well as its minimization in operation tasks. Meanwhile, the second option provide full controllability and availability since it will be operated internally results in a reduction of bad punctuality and/or mis-handling rates promisingly. Since the second option not only can resolve the current weaknesses of poor availability and punctuality but also can prevent mishandling, which is difficultly achieved from the first option, the author recommends the company consider choosing the solution of establishing an internally-operated delivery department.

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