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Expanding the business operation of a Bangladeshi Textile Company

Case company: Shimul Textile Mills Limited

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Abstract

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This thesis describes a business proposal of expanding for Shimul Textile Mills Ltd. The objectives of the plan are improving the internal management of the company, building the expansion strategy, and financing the new business with the projected sales.

The case company is located in Bangladesh which is the second biggest country of exporting garment products after China. Cheap labour, increasing demand on textile products, and duty-free on raw materials and equipment allow the Bangladeshi manufacturers to diversify their business. However, the high inflation rates and interest rates are the hindrances to achieve high profit margins.

Shimul Textile Mills is located in Narayanganj, the focus area of textile factories in Bangladesh. The company has nearly 20 years of experience in grey fabrics weaving process and good connections with major suppliers and wholesalers in the region. Noticing the capacity and the opportunity of growth, the company's manager decided to invest 90,000€ on new machinery for dyeing and printing. From January 2016, Shimul Textile will provide printed products instead of weaved products.

Besides expanding to a new sector, Shimul Textile will also work on the sustainability of the business. The application of quality control, staff training, and opening showrooms are expected to increase the productivity and the company's image.

The predicted turnover and profit margin of Shimul Textile will be prepared for two years (2016 and 2017). As estimated, the company will lose of 3% in profit margin due to the huge investment on machinery in 2016. However, the situation can get improved in 2017 with the forecasted profit margin of around 4%.

Keywords: expansion, textile, Bangladesh, weaving, dyeing, printing, profit margin

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Abbreviations

BPMN	Business Process Model and Notation
sf	square feet
RMG	Ready made garments
PTS	Primary Textile Sector
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BKMEA	Bangladesh Knitwear Manufacturers & Exporters Association
BTMA	Bangladesh Textile Mills Association

1 Introduction

In this chapter, the basic information of the thesis will be discussed to give the basic information of the topic. There are three main issues, including: the objectives of the thesis, the structure of the expansion plan, and the approaching method.

1.1 The Background

In order to avoid the obliteration in an aggressive and competitive business environment, the organization should consider the expansion as the long-term goals. Expansion provides sufficient opportunities to everybody in the organizations and is pivotal for the survival of the companies. The application of the expansion strategy aims at accelerating sales, market share, or productivity.

1.2 The objectives of the thesis

The purpose of this thesis is to create the expansion plan for the case company- Shimul Textile Mills Limited. The thesis will include the analysis of industry and the company's situation to indicate the need and opportunity of growth. The detailed expansion strategy, which explains clearly where and how to expand will be illustrated in the plan. The final part of this thesis shows the financial calculations; including: production cost, pricing, and sales forecast to support Shimul Textile Mills in terms of the budget preparation.

1.3 The structure of the expansion plan

There are four main issues discussed in the expansion plan for Shimul Textile Mills, including:

- Market opportunity for the expansion: This portion of the expansion plan provides an overview of the industry where the business operates. Because Shimul Textile Mills Company opens in an unstable economy condition with a high rate of inflation (7.5% in 2015), the manager needs to consider the industry growth to price the products and control the logistics. The market analysis is carried out to look at the industry, consumer behaviour and competition level in the textile market.

- The current situation of Shimul Textile Mills Company: The company analysis is to provide reader with a comprehensive understanding of the company's vision and the circumstances. The important features of the business operation will be stated clearly with the strengths and shortcomings to support the company manager in decision making.

Additionally, the detailed description of products and productivity is given to indicate the need for expansion.

- The expansion strategy: Based on the research information of the market and the company, the expansion strategy will be established to explain “how” and “by whom” the tasks will be finished. The process of expanding and all the involved parties will be discussed. This is the most important part in the thesis, which suggests the suitable solution for the case company.

- The financial plan and the projected sales for upcoming two years: No business can run without the monetary fuel. Because Shimul Textile Mills is a manufacturing company, the job costing method will be employed to calculate the production cost. Additionally, since the company want to expand its business, they will need new pricing strategy to adapt with the change. Also, to indicate the profitability of this expansion plan, sales forecast is involved in the financial part.

1.4 Methodology

In order to analyze the current performance of the case company, the author examines the secondary data of the company’s previous performances. Secondary data analysis refers to the interpretation of the available information (Burns & Bush, 2010). The data needed for the calculation is collected from the annual reports of Shimul Textile Mills and the Bangladeshi textile industry. The purpose of statistical data is to answer the following questions: Is there a high probability of profitable investment in the new growth?

In addition, to make the realistic expansion plan, Shimul Textile Mills should look at the trend and expectation of its market and customers. Also, it is important for the company to detect the problems in its’ internal operation. Therefore, the qualitative approach also contributes to the analyzing process. The information for the qualitative research has been collected from the interview with the manager of the client company- Mr Shimul Bhuiyan. During the conversation with the author, Mr Shimul Bhuiyan has shared the opportunities and challenges of Shimul Textile, as well as expressed the expected development of the company in the future. The qualitative results will show the direction for Shimul Textile to expand as well as the supplementary actions needed for the expansion.

2 Theoretical framework for the expansion plan

2.1 Industry analysis

To expand the business, it is crucial to understand the industry and discuss the economic conditions that affect the sales volume. The key external factors were proposed (Team FME 2013, 6) as the PESTEL analysis, which looks at Political, Economic, Social, Technological, Legal, and Ecological issues. The PETLE analysis provides the companies with a framework to investigate the external environment and focus on key implications discovered from the research.

Table 1. PESTEL analysis (Team FME 2013, 6, 20)

Political factors	Economic factors
Political stability Stability of neighbour	International situation and trends Inflation Finance and credit
Social factors	**Technological factors**
Lifestyle Media and publicity Buying pattern	Technology development and legislation Information and communication
Legal factors	**Ecological factors**
Employment and operational laws Tax regulations Health and safety Import and export	Infrastructure Cyclical weather Natural and energy resources Ecological consequences

Although the study of those external factors does not give organizations the control power to modify or manage, the understanding and awareness of PESTEL will help the managers make the right decisions for growth.

By applying PESTEL analysis in the client company, this plan can show the factors impacting the company's sales and expenses, such as:

- The factors which increase the cost of production annually, and the projected increase. For example: inflation rate, low technology, and export tax
- The factors which may decrease the cost of production, such as: government's motivation policy.
- The factors which can stimulate the sales, such as: market trend, or international buyers. Although Shimul Textile does not sell the products directly to the international wholesalers, the current B2B customers of the company work as the export agencies of

Bangladeshi textile. Therefore, the demand of the international buyers will indirectly affect the sales of the case company.

2.2 Consumer analysis

In the business, customers are considered as the final destination of products and the source of income. By understanding the trend and expectation of customers, company will be able to compete with the competitors and increase sales. The main focus should be put into the customers' buying motivation and the gap between supply and demand.

The customers' motivation to buy the products: to make customers buy the products, the quality and the price have to fulfil the expectation. According to Gelb (2014), radical customers, who are very thorough financially, will prefer the best products or services within their budget. In addition, if a customer can have the equal benefits offered by two suppliers, price will work as a tie-breaker.

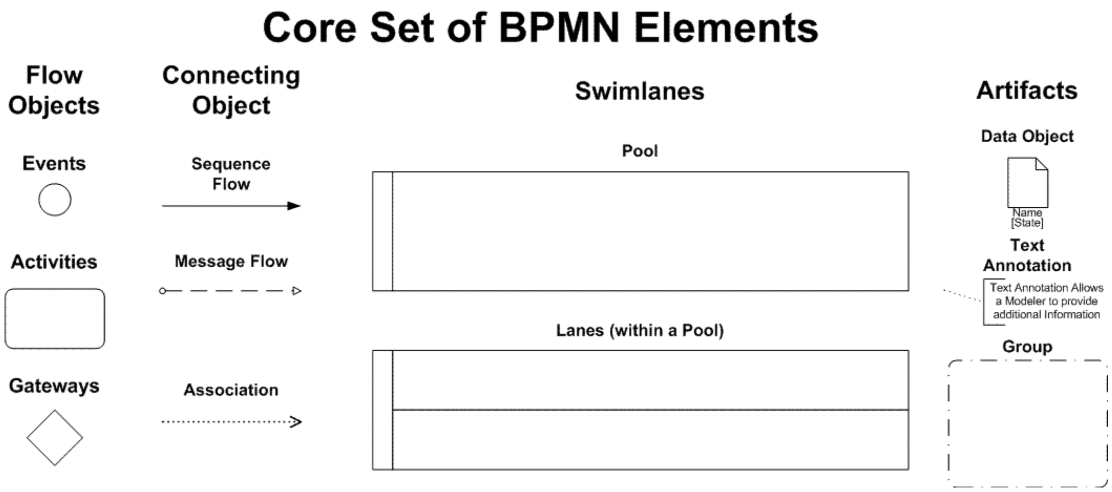
The gap between supply and demand: to achieve the high sales, company should ensure there is a need from the targeted customers to buy the product. It is important to understand what the customers expect and how much they want. The insight in the customers' demand helps the manufacturers avoid the shortage or excess of production. According to Chopra and Sodhi (2004), while the excess inventories hurt the financial performance of the companies, the shortage of products may lead customers to the competitors.

2.3 Business process analysis

It should be evident that the business process has an important place in understanding the context of use. A business process contains a set of logically related business activities that combine to deliver the valuable assets (e.g. products, goods, services or information) to a customer (Cousins and Stewart, 2002). By defining the business in the detailed stages, the managers can easily address the problem and make the improvements.

In order to classify the business process in the orchestration and choreography, the Business Process Model and Notation (BPMN) can be implemented to design the process diagram (Gagne and Ringuette, 2015). A proper BPMN can provide the businesses the ability of understanding their internal business procedures by a graphical notation and provide the organizations the capability to deal with these procedures in a standard manner. The notational elements in business process diagrams are divided into four basic categories, each of which consists of a set of elements, shown in the figure below.

Figure 1.BPMN Notional Elements (Cobb, 2012)



Flow Objects: Events are the relevant issues happening externally or internally and having impact on the business process. Activities represent the work performed during business processes. Gateways show the split and join behavior of the work flow.

Connecting Objects: Connecting objects connect flow objects, swimlanes, or artifacts. Sequence flow is used to connect the flow elements in one pool, while message flow describes the relation between two pools.

Artifacts: Artifacts includes the supplementary data, groups, and annotations for the flow objects. The data objects can present the paper document, electronic information, or physical artefacts. Annotation is a note by way of explanation added to the objects and does not affect the flow. Group is presented inside a dotted line box, showing the bracket of the relevant activities.

Swimlanes: Swimlanes are used to determine the scope of business processes. Each process is located in a single pool and bound to all the roles presented in the pool.
(Recker, 2012, 208,210)

2.4 Competitor analysis

Among all the external factors impacting the business performance, competition needs much concentration and consideration when firms want to expand their business. While in concentrated industry like textile, competitor analysis becomes a vital part in expansion strategy; in highly fragmented industries like textile market in Bangladesh, the impact of the individual competitors is marginal. However, the casual knowledge about competitors is always helpful for all the business in general. The understanding of your competitors not only helps the organizations to make the advantages over them, but also suggests the good business ideas used in their operations.

Czepiel and Kerin (2011, 4) proposed three tasks as a framework for competitor analysis:

- Identifying the current and potential competitors: It is essential for the firms to recognize their rivalry. The method to identify the competitors is looking at the target customers. The rivalries are those who provide the same or alternative products or services to the same target customers.

- Identifying competitors' advantages and disadvantages. The strengths of competitors need collecting qualitatively (strategy, mind-set, or business scope) and quantitatively (sales, market share, or product lines).

- How companies can compete: After identifying the reasons for advantages, the organizations will be able to copy those experiences into their business or improve their business towards those experiences. Michael Porter suggested three axes of competition:

  Price: A price advantage can be a powerful tactic to business success. Especially when Shimul Textile mainly copes with wholesalers, low-cost offerings will work as the attraction.

  Differentiation: The second way for enterprises to compete (recognized in the economic theory of monopolistic competition) is by differentiating their goods and services from those offered by other suppliers.

  Customer focus: The third mode of competing, well known to those in marketing, is not trying to sell to the world in general, but focusing a company's offering on a specific market.

2.5 Expansion strategy

When planning for the expansion, the manager should look at the investment and allocation of resources. The important factor for the expansion strategy is to balance the company's goals and its capabilities (Wood, 2013, 29). By analyzing the company's internal environment, the manager can determine the strategic plan for expansion and identify the best arrangement of the available resources (supply, distribution channel, human resource, and capital).

2.5.1 Problem defining

The first step of developing is to identify the problem to improve it. According to Burns and Bush (2010), problem is defined as the event, which demands manager to select the best option among the alternatives. There are two sources of problem, namely: the failure to meet objective, and opportunity.

Failure to meet objective usually happens in the controlling system when the there is a gap between the expectation and the actual performance. Reasons for the gaps can be resulted from the lack of communication between the managers and workers; or the lack of management in the working process. This problem requires the sound monitor system to control and close the gap.

Opportunities refer to the problems arising from the chances for progress or advancement. Managers can recognize opportunities when they review the performance and perceive the signal to move forward. In practice, the opportunity problems are acknowledged when managers compare between what did happen and what could have happen; or between their performance and their competitors' performance (Burns & Bush, 2010, 117).

2.5.2 Expanding direction

There are various options for the company to expand. However, regarding the size of the company, the limited budget, and the nature of business, the company should identify the most suitable expansion strategy. Ansoff (2007) has proposed four major trends for growths, including: market penetration, product development, market development, and diversification.

- Market penetration: This is obviously the easiest and most risk-free way to expand. Market penetration means offering the current product in the existing market, but increasing the revenue, market share or strengthens the product image. This tactic may require a bigger location, different pricing strategies, improved marketing techniques. Market penetration is usually employed for the products in the growth stage.

- Product development: This approach mainly focuses on customers' relationship and satisfactions. In product development, companies can launch the product innovations or new product lines in the existing market. This growth method is more expensive than the market penetration, but also brings companies more sales.

- Market development: Develops a new market segment or move into new geography with the existing products. Both of these areas require cost outlays and uncertainty. Moving your products into new categories or demographic segments requires market research, beta testing and new marketing strategies.

- Diversification: Introduces the new products to the new market or segment. In this method, companies can either employ their current marketing and distribution channel or involve the new strategy.

2.5.3 Objectives of expansion

The objectives are the short-term targets, which can be achieved through the implementation of strategic plan. The clear recognition of objectives helps the organizations avoid deviation from their goals and reduce the unnecessary costs during the expanding procedures. There are three common categories of objective, namely: financial objectives, marketing objectives, and societal objectives (Wood, 2013, 91).

Financial objectives refer to the growth plans which focus on financial results, such as: sales amount, revenue, or market share. The financial objectives need to satisfy conditions: consistent, time-defined, and measurable.

Marketing objectives include the management of external relationships and internal activities. Marketing objectives aim to raise the customers' awareness of the products and indirectly, works as the supportive plan for the financial objectives.

Societal objectives help companies improve their image and status in the society. Especially for the manufactures, since the environment gets more concern in the world, the manufacturers should put more effort to develop the ecological-protection product and production. In addition, the societal objectives can be expressed through the social activities such as charity, or saving natural resources. (Wood, 2013, 92).

2.5.4 Planning for expansion

The final goals of all the market research, the preparation is to figure out the strategic plan for expansion. This plan should include the organized actions with the detailed description of how to fulfil them and the required resources to support the expansion. To establish a safe and sound plan, companies have to brainstorm the following issues:

- What to extend (production, product lines, sales, segment)

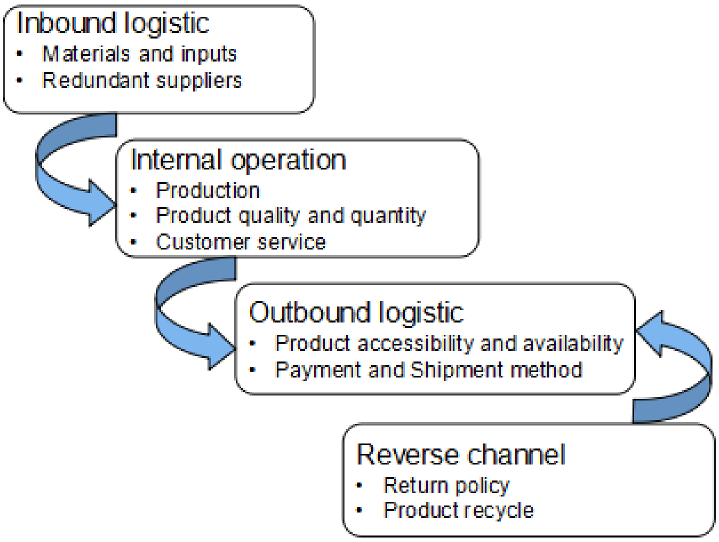
- What actions needed for extension
- What are the resources required for the expansion? And where are the supplying sources for those resources?
- Who will be the person in charge of each activity

2.6 Value chain

The logistic channel or value chain comprises of two sectors: supply (also called value chain) and distribution (also called marketing channel). Supply chain includes all the activities related to input materials (suppliers, cost of raw materials, inbound transportation, etc.). Distribution logistic is all activities related to finished products, such as: inventory management, storage, and merchandise to customers.

To plan for logistic, companies should understand the function and value of each channel. Value of products is contributed by the suppliers, wholesalers, retailers, customers and other participants to deliver the products which fulfil customers' needs. By understand the roles of all involved parties in the logistic channel, companies can utilize the strengths of all partners to enhance and grow their business.

Figure 2. Elements in value chain (Wood, 2013, 150)



Four main functions in the logistic are inbound, internal operation, outbound, and reverse channel. Inbound function refers to the contribution of suppliers and the external sources, which affect the input of the products. Supplier's management is important to make sure all the materials needed for production are obtained adequately and economically.

Outbound function refers to the movement of material associated with storing, transporting, and distributing goods to customers (Business Dictionary). In addition, the internal operation deals with the product, production, and receiving orders from customers. In this section, quality control and productivity are the most important issues. Finally, reverse logistic enables the return of goods in the opposite direction to the normal flow (i.e., from downstream to upstream).

2.7 Financing

2.7.1 Production cost

Drury (2008) has suggested the calculation method for manufacturing cost, including job costing and process costing systems. Job costing is a method which is applied in the business where the products are unique, which requires the separate calculation process for each product or service. On the other hand, process costing is used in the situations when mass of identical products are produced. Instead of allocating cost to each product, companies can attribute the costs to each process of producing. Regarding Shimul Textile Mills as the manufacturer of identical products, the process costing will be used to calculate the production cost.

The followings are the elements in the process costing:

- Input: In the production cost, input is the raw materials needed for the producing process.
- Output: The finished or partially finished products are called the output.
- Normal loss: The losses which happen under efficient operating condition, also called unavoidable losses.
- Abnormal loss: The losses which are not inherent to the production, but arise from the insufficient process (such as the unnecessary waste of ingredients, or the default products), also called controllable losses.
- Scrap value: The worth of physical assets when they are no longer usable.
- Abnormal gain: Abnormal gain comes from the unexpected efficiency in the production, which results in more output than expected. (Drury, 2008, 101, 102).

2.7.2 Pricing decision

The value of price is not only the profit originator, but also the competitive advantage of the company. Customers will pay money when they receive the expected value with reasonable price. Especially, in the highly fragmented market, customers have various options and great bargaining power, right pricing strategy will motivate the sales of products.

When setting the price, managers should consider three aspects: companies' expected profit margin, customers' received value, and competitors' price. Profit margin refers to the percentage of revenue remaining after all costs, depreciation, interest, taxes, and other expenses have been deducted (Pratt, 2005, 115).

Equation 1. Profit margin (Pratt, 2005, 115)

$$\text{Profit margin} = \frac{\text{Net Income (Sales - Expenses)}}{\text{Sales}}$$

Among three factors, customers' perception is the most important consideration, since they are the payers and receivers of products' value. The customer-based pricing plan can be made through the questionnaire or survey or consultancy with the main buyers.

Besides satisfying customers, companies also need to balance their price and cost of products. The lower price for good quality products may attract more customers, but also bring the risk of loss. In addition, based on the competitors' analysis, companies can consult the price range for their products. For example, if the strategy is to gain more market share with the similar products, companies can reduce their prices lower than their competitors or give promotion codes. However, higher prices compared to competitors may position the quality of products in customers' perception.

The final unit price will be computed from production cost and sellers' expected margin, added with other marketing costs, transportation costs, and administration costs.

2.7.3 Projected financial documents

Forecasting is one of the most essential parts in the expansion plan, showing the companies potential loss or gain, and the estimated amount of required capital. Based on the projected data, managers can adjust the expansion plan to adapt the company's capability and financial objectives.

There are three projected documents will be made for Shimul Textile Mills in upcoming two years: income projection, cash flow statement, and balance sheet. Income statement, also called profit or loss statement, is the record of sales and all the expenses happening during a specific period. It begins with an entry for revenue, and subtracts the costs of doing business;

including cost of goods sold, operating expenses, tax expense and interest expense (Investopedia).

Cash flow statement provides the information of cash inflow and outflow, showing the available cash in the company. Balance sheet is a financial statement that summarizes a company's assets, liabilities and shareholders' equity at a specific point of time (Investopedia).

To forecast the sales and costs, the company can use multiple sources of reference:

- Judgemental approach: the opinions of other people, such as the outside expert, the company’s personnel, or the company’s managers.
- Research-based approach: the data collected from survey, such as asking buyers about their purchasing in the given markets.
- Statistical approach: the historical data of the company, or the quantitative test between the factors affecting sales.

(Wood, 2013, 230)

For Shimul Textile Mills, because the company already have opened business for 20 years, the historical sales records must be reliable to predict sales. In addition, the interview with the suppliers and the company’ manager played an important role in determining the costs of goods sold and unit sales price.

3 Empirical analysis and practical expansion plan for Shimul Textile

3.1 The case company

Shimul Textile Mills Limited was established in 1996 in Narayanganj, a town in central Bangladesh, 20 km southeast of Dhaka, the capital. It is a small sized cloth-manufacturing company which mainly produces raw/grey fabrics.

Md. Shimul Bhuiyan, Managing Director of the company, and Md. Kaium Bhuiyan, Chairman of the company, started this business with a small amount of capital (worth of 80,000 Euros) and 15 employees in the beginning. Gradually, the company has been increasing its business operation. At present, the company has capital worth of more than 300,000 Euros and almost 25 employees and staff are employed. The Chairman and the Managing Director of the company have recently proposed a plan to invest 200,000 Euros in order to expand the business operation as well as to increase the profit margins.

The best geographical location has given this company a very good advantage to smoothly run and expand the business operation. Since the city, Narayanganj, has been posing a competitive attraction in terms of communications for the businessmen as it is flanked by rivers, the Shitalakshya on the east and the Buriganga on the south and southwest. Gradually, the city has become the best business and industrial area of Bangladesh and more than 75% of textile industries and garments of whole country are established in Narayangang.

The last six years Income Statement of Shimul Textile is presented in the table below:-

Table 2. Income statement from the last six years (Records of Shimul Textile)

	2009	2010	2011	2012	2013	2014
Sales	1228560.00	1253131.20	1278193.82	1303757.70	1329832.85	1356429.51
Scrap value	750.57	790.07	831.65	875.43	921.50	970.00
Cost of Materials	798564.00	814535.28	830825.99	847442.51	851093.03	868114.89
Operating expenses						
Storage rent	2474.48	2749.42	3054.92	3394.35	3771.50	3970.00
Transportation	1499.59	1578.51	1661.59	1749.05	1841.10	1938.00
Industry supply	1187.75	1250.27	1316.07	1385.34	1458.25	1535.00
Maintenance	1253.53	1319.50	1388.95	1462.05	1539.00	1620.00
Machine cost	771.46	812.06	854.80	899.79	947.15	997.00
Loan interest	1520.00	1140.00	760.00	380.00	0.00	0.00
Advertisement	240.00	252.00	264.60	277.83	291.72	306.31
Depreciation	2880.78	3032.40	3032.40	3192.00	3360.00	3360.00
Administration cost						
Labour cost	23,715.33	24,963.51	26,277.38	27,660.40	29,116.21	30,648.64
Electricity	3,853.43	4,056.24	4,269.73	4,494.45	4,731.00	4,980.00
Office Stationery	132.00	132.00	165.00	165.00	170.00	170.00
Phone and Internet	510.70	537.57	565.87	595.65	627.00	660.00
Other costs						
Income tax	368793.17	376176.38	383707.64	391389.94	399226.31	407219.85
Profit ot Loss	21914.35	21386.12	20880.55	20144.78	32582.09	31879.82
Profit margin	1.78%	1.71%	1.63%	1.54%	2.45%	2.35%

Because the profit margin of the company remained quite low while the available cash was not utilized, the manager decided to expand the business from weaving to dyeing and printing. It is expected that Shimul Textile can obtain 5% of profit margin in two years after the expansion. However, in the interview with the company's manager (appendix), he stated that Shimul Textile contained some problems related to weak management system and low productivity. Therefore, along with the expansion plan, the company's internal operation will be analyzed to solve the current issues.

3.2 Textile industry in Bangladesh

The textile industry is considered as the cornerstone in the Bangladeshi economy system (Hassan, 2014). Before 1980, the textile was a small career in Bangladesh till the foundation of Desh Company, which becomes Desh Group nowadays. The founder of this Group, Noorul Quader, was the pioneer of garment industry in Bangladesh (Khan, 2015). According to Bangladeshi Textile Today, Bangladesh textile industry has rapidly increased over the decades to the second largest in the world.

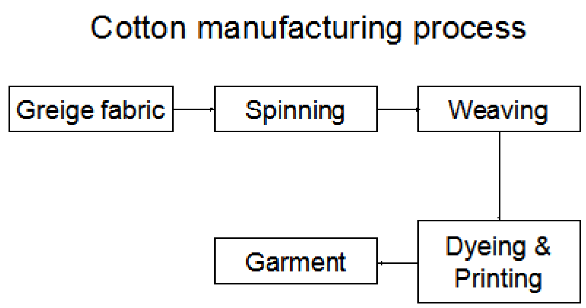
Textile industry is the only manufacturing and export industry which originates billions of dollars in Bangladesh. Compared to the contribution of 0.001% of the total export earnings in 1976, garment industry was comprised of approximately 75% in the Bangladeshi overseas market in 2005 (Textilelearner, 2011).

The three independent associations are mainly involved and responsible for the textile sector in Bangladesh: the Bangladesh Textile Manufacturers Association (BTMA), which represents spinners, woven fabric manufacturers, and dyeing units (btma, 2015); the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), which represents the RMG sector, mainly the cutting and sewing units (bgmea, 2015); and the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), which represents the knitwear fabric manufacturers, the fabric dyeing units, and the knit garment cutting and sewing units (bkmea, 2015). These three associations usually work either in collaboration, or independently from each other. (Yunus, 2010).

The textile industry in Bangladesh includes three main categories: public sector; hand-loom sector; and the organized private sector. Among all, the private sector has the biggest amount of workers and is the fastest growing sector in the country. The Bangladesh government employs the motivation strategy to encourage the export of local fabrics. In the garment industry, the duty-free policy is applied for imported machinery and cotton. In addition, the recent reform in the fabrics market allows more foreign-direct-investment and competition among the manufacturers. (Malhotra, 2006).

The cotton and cloth manufacturing process is illustrated in the diagram below:

Figure 3. The Cotton and cloth manufacturing process



In Bangladesh, not all the companies can cover all the three stages, from spinning to dyeing and printing. Actually, only the big groups such as Nannu Group and Pakiza Group can fully cover the manufacturing process. Most of the small companies in the private sectors only handle spinning or weaving. The client company, Shimul Textile, has been working on weaving process.

Based on the research of Mazedul Islam, Adnan Khan and Monirul Islam, the PESTEL analysis of Bangladesh textile is presented in the table below:

Table 3. PESTEL analysis of Bangladesh textile industry

Political factors	Economic factors
• The tight money policy in Bangladesh leads to the rapid increase in production cost. Also, the high interest rate from national bank (from 15% to 20%, according to Bangladesh central Bank, 2015) forces the manufacturers to raise product prices. • United States requires a high duty on the textiles imported from Bangladesh, which affects the export negatively. • Bangladesh is the beneficiary of the duty-free, quota-free market access for all-products-except-arms to the EU.	• High inflation rate (6.24% in 2015, according to Bangladesh bank, 2015) leads to high production costs. • Increasing demand of textile products, due to the increase of population (1.2% in 2014, according to The World Bank). • Recent statistics from the Bangladeshi government's Export Promotion Bureau show that garment exports are still rising, with year-on-year growth of 7.8 percent in January and 6 percent in February (Stratfor, 2015).
Social factors	**Technological factors**
• The collapse Rana Plaza, the main commercial building in Dhaka, has raised the attention on working conditions in Bangladesh (Reuters, 2014). • There are more concerns of increasing labour wages in textile industry, which burdens the manufacturer’s capacity. However, low wage also impacts the productivity negatively since workers are	• Textile industry has obsolete equipment and machinery. The lack of updated technology decreases the competitiveness of Bangladesh textile. • Due to the obsolete technology the cost of production is higher in Bangladesh as compared to other countries like India, Pakistan and China.

demotivated and moved on to more attractive industries. • Bad reputation of child labour, labour shortages and increasing wages in China make international buyers move their sourcing to other Asian countries, including China.	
Legal factors	**Ecological factors**
The duty free on imported raw materials and equipment in textile motivates both the domestic and the foreign investors to participate in the sector.	• Textile sector is the second largest contributor to river pollution in Bangladesh. However, the policy states that environmental pollution is negligible, but does not go further into the matter.

3.3 Consumer Analysis

The main drives for the growth of Bangladesh PTS are:

- Domestic Consumption of apparels, home textiles and technical textiles (finished fabrics, saris, lungis, etc.).
- Growth of RMG export from Bangladesh and direct export of various textile products.

In the international market, the garments exported from Bangladesh increased by 56% in the period from 2008 to 2010. Especially, the bilateral agreement of duty-free trade between India and Bangladesh in 2011 has fuelled the consumption of Bangladeshi textile products. In the next 10 years, it is predicted that the export to the main buyers will increase rapidly. (McKinsey, 2011).

A study in 2014 jointly conducted by the United States Fashion Industry Association (USFIA) and the University of Rhode Island (URI) has made Bangladesh hopeful about the potentiality of the garments industry. According to the study, the fashion companies especially of United States are expected to uplift their main sourcing from Bangladesh in the next two years. The renowned companies forecast the growth for export-value of around 7-9% annually. As a result, it is expected that the export of garments of Bangladesh may double by 2015 and nearly triple by 2020 which clearly indicates that Bangladesh provided can successfully overcome a few challenges regarding the development of infrastructure and the skilled workforces. (Hassan, 2014).

In the domestic market, only 21% of the total demand for yarn is met locally in Bangladesh. The figures for grey fabrics are not much better as only 28% of the total demand is met locally. According to the research of Kamal (2015), Bangladesh still needs more than 200 mills to fulfil the demand.
(IDLC Finance Limited, 2015).

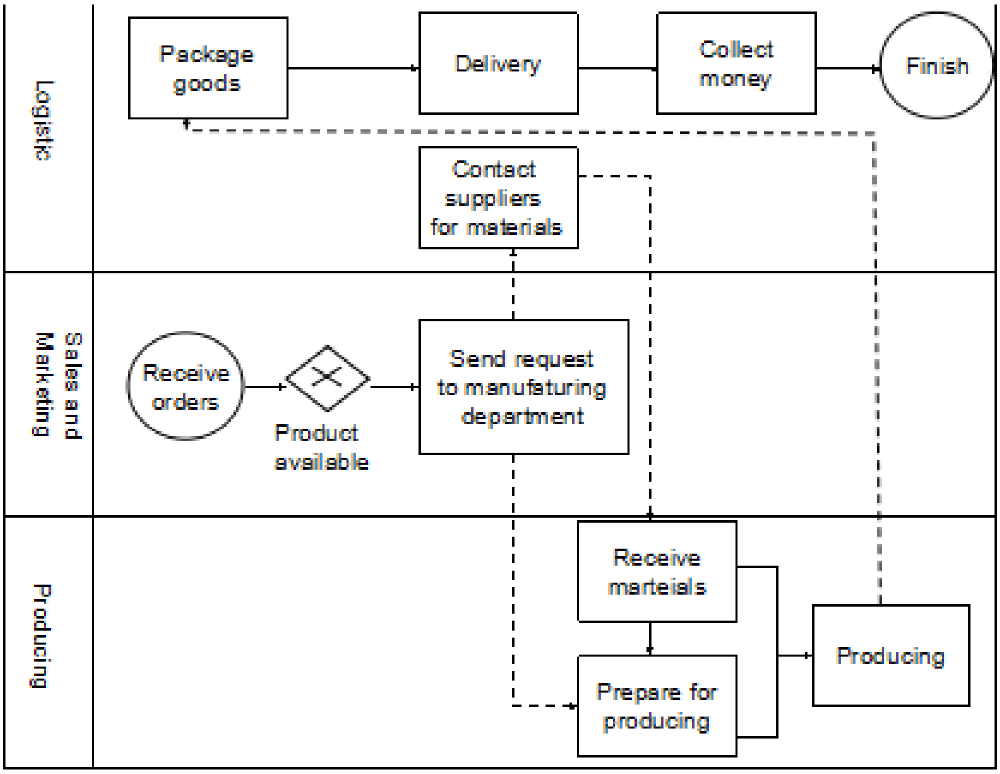
Realizing the great opportunity for growth, Shimul Textile Mills decided to expand the business by entering into the new business line - printing and dyeing, as well as raising the production volume. Recently, Shimul Textile has produced the weaved fabrics from the raw cotton with the sales amount of 144,000 sf of weaved cotton per month. The manager of the company predicted that the possible sales amount could be up to 250,000 sf of dyed cotton per month.

Currently, the company has corporated mainly with the local market wholesalers in Narayanganj. These B2B customers do not have official websites or proper business management systems. They simply work as the intermediaries between the manufacturers and the end-users. Due to the lack of marketing and communication, the markets of these wholesalers are limited around Narayanganj and the close regions. The manager of Shimul Textile has discussed with the bigger B2B customers, such as: B.D.Textile Mills Pvt. Ltd, Pakiza Textiles Ltd, Nannu Textile Mills Ltd, and Regent Textile Mills Ltd to offer the new products in a big scale.

3.4 Business process analysis

Because the manufacturing industry in Bangladesh involves less high-tech approaching, all the business activities of the company are controlled in working papers rather than proper computer’s system. This disadvantage creates troubles for Shimul Textile when the managers want to review the business process as a whole. Also, the lack of technology involvement disables the company to use the complicated management system to monitor the business and there is no clearly defined process in the company. After the study and interview with the top level managers of the case company, the current business process of Shimul Textile Millls is established in the diagram below:

Figure 4. Current BPMN model of Shimul Textile



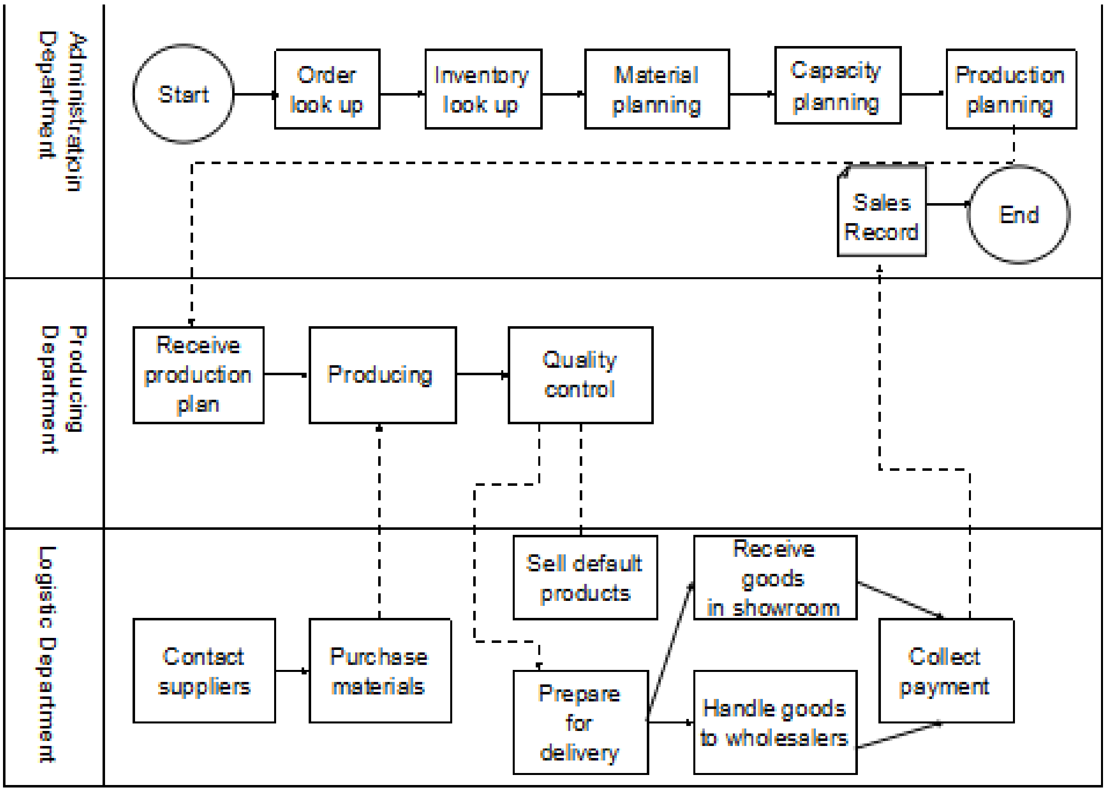
Basically, the company contains three departments, including: logistic, sales and marketing, and producing. The production of the company is based on the customers' orders, which are received by the sales and marketing department. By now, the main function of this department is only to receive and transfer orders, materials between the logistics and the producing departments. The managers of the company also realized that they have spent unnecessary money to remain the sales and marketing department while its function is too marginal and not really effective.

In addition, there are two problems with the producing department. Firstly, the company is inactive in the manufacturing process because it has to wait for the orders from the wholesalers. The lack of sales forecast and pre-planning results in the inefficient allocation of the resources, such as: time, labour work, capital, and storage. Previously, the company used to have much free time for the workers from June to August due to the small amount of orders, but all the workers had to suffer the hard time and extra workload around April and May due to the excess market demand. Therefore, the company could not plan for the materials and workforce effectively, and the quality sometimes did not meet the expectation.

Another problem from Shimul Textile Mills is the lack of proper quality and employees' performance control system. The company pays all the employees with the same amount of salary monthly, disregarding their performance and productivity. In the interview with the manager for Shimul Textile, he said that this problem had created some personal conflicts within the staffs. For example, when the company got complaint of default products from the customers, the employees would attribute the mistakes to each other, and feel treated unfairly. Additionally, because of the mass producing, the default products are inevitable during the process. However, the production managers cannot detect all the defaults by himself at one time, which cause the company extra cost to retrieve the default products from customers.

In order to support the expansion strategy, the new business process is proposed for Shimul Textile:

Figure 5. Suggested BPMN model for Shimul Textile



In the new business model, the sales and marketing department is replaced by the administration department, whose main function is to contact customers, find new orders, and manage the resources properly. Another important role of this department is bookkeeping and forecasting the sales based on the historical data. By this approach, the company can be active in the production and resources allocation.

The quality control activity is also an effective solution for the manufacturing department. Instead of relying on one production manager, Shimul Textile can assign the employees to do the product double check after producing. For example, the company can assign the specific product amount and customers' orders to some specific employees. By this method, the manager can easily know who are responsible for which orders, and the productivity of each employee. In this case, the employees will be responsible for their product quality by doing double check themselves. The bonus or the deduction of salary will be paid based on their productivity and default products.

3.5 Competitors analysis

Bangladeshi infrastructure competitiveness is ranked 130th in the world but the ranking of country's competitors is much better. As shown in the figure 16, Bangladesh ranks 130th with only 2.7 points out of 10 points. The interviewees believe that because of the unplanned industrial infrastructure the production at the garments industry suffers a lot. It is not only the suffering of the production but also the delivery time is affected by the country's poor infrastructure. The normal delivery time for knit clothing is around 50-70 working days for the Bangladeshi garments industry. Its competitors have much shorter delivery times, for example: India has 40-60 working days. (Uddin, 2014).

Regarding Shimul Textile Mills, the company's manager said that they have several competitors in the same geographical market, including:

- Alhaj Textile Mills Ltd
- Hossain Dyeing and Printing Mills Ltd
- Regent Textile Mills Ltd

These companies started the printing and dyeing business in the same market with the same pattern of products. In addition, the pricing decisions, the logistics, and the positioning of these companies heavily affect the market share and the profitability of Shimul textile. The table below presents the competitive advantages and disadvantages of each company.

Table 4. Competitors' analysis

Company	Product volume and price	Logistic	Product accessibility
Hossain Dyeing and Printing Mills Ltd	300,000-400,000sf per month. Wholesale price: 0.67 EUR per sf.	Strong relationships with big suppliers in Bangladesh. Well-established product	No showrooms or retail stores. Main wholesalers from Dhaka, Chittagong,

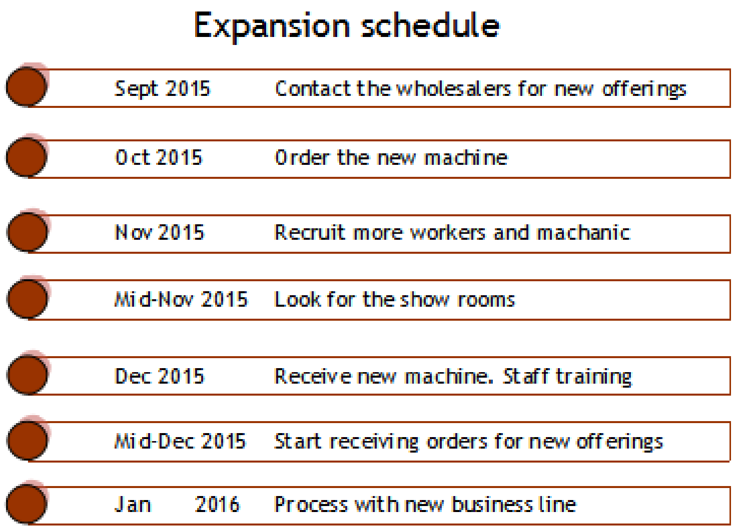
		quality control. Unplanned infrastructure, highly independent on wholesalers.	Narayanganj, Barisal, Sylhet.
Alhaj Textile Mills Ltd	200,000-250,000sf per month. Wholesale price: 0.65 EUR per sf.	Lack of product quality control. Have good price of input because of corporations with suppliers.	One showroom in Narayanganj. Main wholesalers from Chittagong and Narayanganj.
Regent Textile Mills Ltd	300,000-350,000sf per month. Wholesale price: 0.66-0.67 EUR per sf	Flexibility in orders. Independence on wholesalers because of direct selling channels.	Three showrooms in Dhaka. Two showrooms in Chittagong. Main wholesalers from Chittagong, Dhaka, Camilla, Khulna, and other small villages.

3.6 Expansion strategy

The major expansion drive of Shimul Textile belongs to the opportunity problems which are the missed chances to progress. During the market analysis, Shimul Textile can prove the ability to gain more customers and market share. However, the net income of the company in last six years remained low compared to its real capacity. The Manager of the company supposed that Shimul Textile should open the new business line to support the sales and utilize the available cash.

In order to expand the business, Shimul Textile Mills decided to invest in the new business line. In detail, apart from the fabrics weaving, the company will enter to the next stage: the dyeing and printing process. The company will buy new dyeing and printing machinery to process the new business line. The strategy is to use the products of weaving process to continue refining into the readymade garments. By this method, the company can save the cost of input materials while raising the value of the final products. Usually, compared to the weaved grey fabrics, the readymade garments bring higher profit margins. The schedule for the expansion is listed in the diagram below:

Figure 6. Expansion schedule



In September 2015, the manager of Shimul Textile negotiated with the current customers of the companies about the new products. Instead of offering the weaved fabrics, the company would provide the printed clothes with the competitive prices. From the wholesalers' viewpoint, when buying the weaved fabrics, they need to pay extra money to process the dyeing and printing. If Shimul Textile can provide the refined products in a big scale with cheaper prices, that will be more profitable for them. Also, different from the current business scope, Shimul Textile will cooperate with the big wholesalers in different areas to expand the market. Regarding Ansoff's business developing models mentioned above, Shimul Textile will diversify its business by offering new products in both current and new markets.

Shimul Textile decided to order the new machinery from China in the early of October. The payment will be made in January 2016 after the machinery start working without any error. The investment for the new machinery is gathered from the owner's equity and the borrowed capital from bank.

Because of the new machinery and business line, the production requires more staff to support the dyeing and printing process. The recruitment should finish by the end of November.

Table 5. Change of personnel

	Field worker	Mechanic	Supervisor	Production manager	Accountant	Salesperson
Number	25	1	2	1	1	1
New number	40	2	3	2	2	2

As the vision and sales forecast of Shimul Textile, after using the new machinery, the company will produce double than before. The projected amount of products allows the company to open its own showrooms and sell the products to the end-users in different locations in Bangladesh. The company intends to open two showrooms one in Dhaka, the capital city of Bangladesh, another in Narayanganj, the main industrial and business city. In the middle of November, the company's manager has made the renting contract with the landlords for the chosen locations. The showrooms not only work as the distribution channels but also the advertising for new products.

As planned, the new machinery will be delivered to Shimul Textile by December. To ensure the productivity, Shimul Textile will give all the employees one month training with the new dyeing and printing machine. The actual operation will start in January after the wholesalers orders the new products.

3.6.1 Channels and Logistics

Inbound logistic:

- Main input suppliers: Rafiq Textile Mills Ltd, Jahir Textile Mills Ltd, Ashik Textile Mills Ltd
- Redundant suppliers: Akiz Textile Mills Limited, Tania Textiles Ltd

Internal operation:

- Quality control by the employees
- Productivity: personnel training and the involvement of production manager

Outbound logistic:

- Showrooms in Dhaka and Narayanganj
- Wholesalers : B.D.Textile Mills Pvt. Ltd, Pakiza Textiles Ltd , Nannu Textile Mills Ltd , Regent Textile Mills Ltd

Reverse channel:

- Return policy with 2 week guarantee of product exchange and compensation of any loss related to default products for the wholesalers.

One of the main first year objectives for Shimul Textile is to establish strong relationships with three big raw cotton suppliers in the same region, so that they can get the good price deal and reduce the risk of price inflation. To achieve this goal, the company's manager will sign the contract with those suppliers in terms of: minimum cotton amount bought per month and cost of cotton within one year. This contract can be regarded as the forward contract, which determines the amount and the price of assets for the future purchases. Besides the raw cotton, Shimul Textile needs to buy the weaved products from the similar textiles company to have adequate products for printing and dyeing. The weaved fabrics can also be obtained from the three big suppliers, but to ensure the consistency of input and avoid corruption in the supply chain, Shimul Textile plans to have two redundant suppliers for the input.

In the outbound logistic, the company's strategy is to focus on the mass market with the low and average income customers. Therefore, multiple wholesalers will be involved in the product distribution. In addition, Shimul textile will open two small showrooms one in the capital city Dhaka and another in the industrial and business city Narayanganj to strengthen the image and reach more customers. During the exhibition period, the personnel will be educated about the manufacturing process, product features, information of other similar brands, and company's image. Products will not be sold in the showroom, but only exhibited. Company tries to give the wholesalers competitive price and support the sales of wholesalers by advertising their address in the showroom. To reinforce exclusivity, Shimul Textile will gather feedbacks and suggestions from the wholesalers to improve and add the new features to the products. Also after every three months, the best sellers will have the limited products specially. This approach rewards the retailers those sell the highest volume of products and give their customers access to the limited products before anyone else.

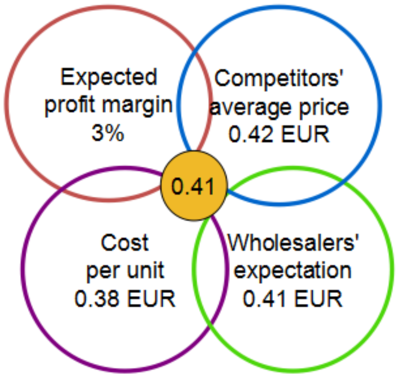
In the internal operation, Shimul Textile will apply the quality control by the employees as mentioned in the business process. Additionally, to avoid the abnormal loss in the production, company will invest more in personnel training and recruit a production manager.

3.6.2 Pricing decision

In Shimul Textile Mills, the pricing strategy is the combination of four factors: expected profit margin, competitors' average price, production cost per unit, and wholesalers' expectation. Usually, the expected price from wholesalers is less than the price of manufacturers offer.

In Bangladesh, the profit margin of weaved fabrics remain low, around 2% to 6% (Reuters, 2014). When Shimul Textile opened its business, profit margin of the company is less than 3% because the difference between the production cost and the sales price is marginal. This is the main drive for the company to expand the business. The margin of the dyed and printed fabrics is better than the weaved products while the extra process is considered to be not that complicated (Interview with the company's managing director).

Figure 7. Current pricing strategy



Cost per unit is the variable cost of one square feet fabric. In the first year after expansion, Shimul Textile will remain the profit margin strategy of 3% to pricing the new products. Also, to compete with other competitors in the market, the offered price should be moderately lower to meet the wholesalers' expectation. In the second year, since the company can get the frequent buyers and the new products are known by the market, the price can raise to achieve the financial objectives of 5% profit margins.

The competitors' average price is suggested by the manager of Shimul Textile. In Bangladesh, most of the small and medium companies like Shimul Textile and its competitors do not have the official websites and publicised information of sales. Therefore, the collected information is based on the interview with the company's manager and the some wholesalers in the local market.

After expanding, instead of stopping at weaving process, Shimul Textile will continue to dye and print the fabrics. The cost of extra procedures and colorant expenses for printing and dyeing will increase the cost of product to 0.41 EUR in 2016 and 0.42 EUR in 2017. The difference in the cost between 2016 and 2017 can be attributed to the probability of increase in raw cotton costs. Compare to the sales price of weaved fabric, the sales price of dyed and printed cotton has much higher value, around 0.66-0.68 EUR in the market. From 2016, Shimul Textile will sell the dyed and printed cotton instead of the old product line, which means the company will obtain higher profit in return.

Figure 8. Pricing strategy in 2016

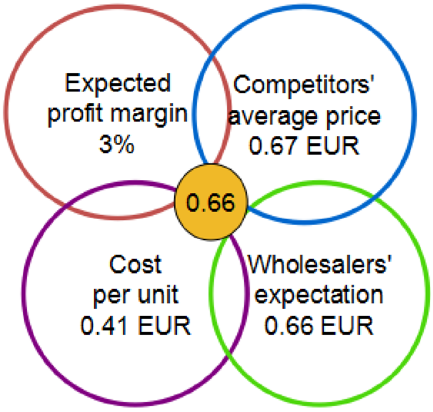
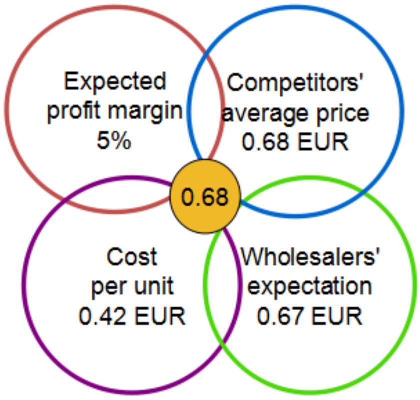


Figure 9. Pricing strategy in 2017



The price is determined by the cost of materials and other expenses in the operation and administration. Because of the new showrooms, Shimul Textile expects to get more corporate orders apart from the current wholesalers. The pricing strategy for corporate orders will be higher than the pricing for the current wholesalers, depending on the quantity, the level of customisation and the delivery instructions. However, in the projected financial documents, the price will remain stable since it is difficult to estimate the new orders and the new prices. Any change will be updated consequently.

3.7 Financing

To accommodate the new machinery, the company will take a loan of 56818.08€ from the bank with 15% interest rate. The loan is supposed to pay back within three years, with the monthly interest of 237€ and instalment of 1579€ approximately.

The annual turnover of Shimul Textile in the first year after the expansion is predicted around 1752381€ with the loss margin of -1% approximately. In the second year, company is forecasted to get about 1996751€ with the profit margin about 4%. The profit in the second year will almost meet the company’s expectation of 5% profit margin.

Due to the constant variations in the price of raw materials, inflation rate, and energy costs, it is realistic to estimate the turnover for only two years. The expenses of cotton and weaved fabrics will be monitored and updated in case those costs move dramatically higher. In the short term, because Shimul Textile will have contract with the suppliers, and the sales amount is discussed with the wholesalers beforehand, it is possible to stabilise the variable costs.

4 Conclusions and recommendations

This thesis aimed at creating a functional expansion strategy for the client company and suggested a solution for its internal operation. Since Shimul Textile is managed as the family business, the operating system is not clearly defined and there is the lack of strategic management. Therefore, in the thesis, the proper system for the company is proposed with some suggestions for the improvement. The intention of the author is to keep the plan as simple and straightforward as possible, so the manager and the other staffs of the company can understand without the academic background.

Initially, the overview of the textile industry in Bangladesh is introduced to support the potential growth of this sector. Also, the PESTEL analysis has defined the impacts of external factors to the textile businesses. It is important for the client company to understand the environment and adapt with the new trends, regulations, and customers' expectations. Additionally, the empirical study has described and indicated the problems in the business process of the client company. After revealing the problems, the practical alternative is introduced. Shimul Textile is suggested to deal with the quality control and improve the productivity by the renewing the business process management.

The expansion plan has answered the proposed questions in the objectives by indicating the opportunity for expansion and proving the profitability of the new investment. According to the findings, Shimul Textile has a great chance of growing since there is a big gap between the demand and the supply of garment products in Bangladesh. The detailed plan with scheduled activities is also described clearly in the thesis to help the company follow up and take corrections if needed.

Regarding the expansion plan, the main drive for the company to growth is the unsatisfied profit margin. As projected, Shimul Textile can nearly achieve the financial objectives of 5% profit margin in two years after the expansion.

The suggestion for Shimul Textile in the future is to give more effort on optimizing the efficiency of the employee. Due to the forecast, the high cost of production is attributed to the normal loss and abnormal loss. If the company can improve the productivity, the loss will be reduced, which may lead to higher profit margin.

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Appendices

Table 6. Process costing 2016

	Raw cotton (sf)	Cloth bought from other suppliers (sf)	Volume of colourant powder (kg)	Volume of cloth output (sf)	Normal loss		Abnormal loss		Scrap value of spoilt output (EUR)
					Raw cotton (sf)	Colourant (kg)	Raw cotton (sf)	Colourant (kg)	
Jan	150,000.00	90,000.00	250.00	234,150.00	3,900.00	32.00	1,950.00	20.00	175.50
Feb	165,000.00	90,000.00	275.00	248,700.00	4,200.00	35.20	2,100.00	22.00	189.00
Mar	181,500.00	90,000.00	302.50	264,705.00	4,530.00	38.72	2,265.00	24.20	203.85
Apr	199,650.00	90,000.00	332.75	282,310.50	4,893.00	42.59	2,446.50	26.62	220.19
May	150,000.00	30,000.00	250.00	175,050.00	3,300.00	32.00	1,650.00	20.00	148.50
June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
July	181,500.00	90,000.00	302.50	264,705.00	4,530.00	38.72	2,265.00	24.20	203.85
Aug	190,575.00	90,000.00	317.63	273,507.75	4,711.50	40.66	2,355.75	25.41	212.02
Sep	200,103.75	90,000.00	333.51	282,750.64	4,902.08	42.69	2,451.04	26.68	220.59
Oct	150,000.00	90,000.00	250.00	234,150.00	3,900.00	32.00	1,950.00	20.00	175.50
Nov	135,000.00	90,000.00	225.00	219,600.00	3,600.00	28.80	1,800.00	18.00	162.00
Dec	121,500.00	90,000.00	202.50	206,505.00	3,330.00	25.92	1,665.00	16.20	149.85

Table 7. Material costs 2016

	Volume of output	Cost of colourant	Cost of raw cotton	Cost of cloth from other suppliers	Total cost of materials	Cost per output
Jan	234,150.00	1201.5	57000	37800	96001.5	0.41
Feb	248,700.00	1467	62700	37800	101967	0.41
Mar	264,705.00	1759.05	68970	37800	108529.05	0.41
Apr	282,310.50	2080.305	75867	37800	115747.31	0.41
May	175,050.00	2170.5	57000	12600	71770.5	0.41
June	0	0	0	0	0	
July	264,705.00	1759.05	68970	37800	108529.05	0.41
Aug	273,507.75	1919.6775	72418.5	37800	112138.18	0.41
Sep	282,750.64	2088.336375	76039.44	37800	115927.77	0.41
Oct	234,150.00	1201.5	57000	37800	96001.5	0.41

Nov	219,600.00	936	51300	37800	90036	0.41
Dec	206,505.00	697.05	57000	37800	84667.05	0.41

Table 8. Product flow 2016

Month	Open inventory (sf)	Produced (sf)	Sale amount (sf)	Close inventory (sf)	Cost of sales (EUR)
Jan	18600.00	234150.00	234000.00	18750.00	95940.00
Feb	18750.00	248700.00	234000.00	33450.00	95940.00
Mar	33450.00	264705.00	240000.00	58155.00	98400.00
Apr	58155.00	282310.50	246000.00	94465.50	100860.00
May	94465.50	175050.00	252000.00	17515.50	103320.00
Jun	17515.50	0.00	0.00	17515.50	0.00
Jul	17515.50	264705.00	258000.00	24220.50	105780.00
Aug	24220.50	273507.75	246000.00	51728.25	100860.00
Sep	51728.25	282750.64	240000.00	94478.89	98400.00
Oct	94478.89	234150.00	234000.00	94628.89	95940.00
Nov	94628.89	219600.00	234000.00	80228.89	95940.00
Dec	80228.89	206505.00	234000.00	52733.89	95940.00

Table 9. Salary calculation per month in 2016

	Field worker	Mechanic	Supervisor	Production manager	Accountant	Salesperson
Number	40	2	3	2	2	2
Working hours	192	72	144	192	48	48
Cost per hour (EUR)	0.456	0.8	1.3	1.3	0.8	0.8
Total	3499.2	115.2	561.6	499.2	76.8	76.8
Salary	4828.8					

Table 10. Machine cost

1h = 250 sf	Volume of input (sf)	Machine hours	Cost per hour (EUR)	Total cost (EUR)
Jan	240000	960	0.125	120
Feb	255000	1020	0.125	127.5
Mar	271500	1086	0.125	135.75
Apr	289650	1158.6	0.125	144.83

May	180000	720	0.125	90
June	0	0	0.125	0
July	271500	1086	0.125	135.75
Aug	280575	1122.3	0.125	140.29
Sep	290103.75	1160.415	0.125	145.05
Oct	240000	960	0.125	120
Nov	225000	900	0.125	112.5
Dec	211500	846	0.125	105.75

Figure 10. Profit margin 2016

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sales	156780.00	156780.00	160800.00	164820.00	168840.00	0.00	172860.00	164820.00	160800.00	156780.00	156780.00	156780.00
Scrap value	175.50	189.00	203.85	220.19	148.50	0.00	203.85	212.02	220.59	175.50	162.00	149.85
Profit	-23283.70	-23283.75	-22929.60	6424.76	6781.41	-935.75	7124.40	6415.58	6060.82	5698.30	5694.36	5690.60
Profit margin	-15%	-15%	-14%	4%	4%		4%	4%	4%	4%	4%	4%

Figure 11. Profit margin 2017

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sales	181832.00	181832.00	186320.00	190808.00	191760.00	0.00	172584.00	184008.00	179520.00	175032.00	175032.00	175032.00
Scrap value	272.75	272.75	279.48	286.21	287.64	0.00	258.88	276.01	269.28	262.55	262.55	262.55
Profit	7335.25	6797.41	7160.48	7522.71	7653.94	-5914.41	6002.85	6948.11	6566.04	6213.77	6218.27	6222.02
Profit margin	4%	4%	4%	4%	4%		3%	4%	4%	4%	4%	4%

Table 11. Income statement 2016

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sales	156780.00	156780.00	160800.00	164820.00	168840.00	0.00	172860.00	164820.00	160800.00	156780.00	156780.00	156780.00
Scrap value	175.50	189.00	203.85	220.19	148.50	0.00	203.85	212.02	220.59	175.50	162.00	149.85
Cost of Materials	95940.00	95940.00	98400.00	100860.00	103320.00	0.00	105780.00	100860.00	98400.00	95940.00	95940.00	95940.00
Operating expenses												
Dyeing machine	30000.00	30000.00	30000.00									
Showroom rent	320.00	320.00	320.00	320.00	320.00	120.00	320.00	320.00	320.00	320.00	320.00	320.00
Storage rent	340.00	341.00	342.00	343.00	344.00	200.00	346.00	347.00	348.00	349.00	350.00	351.00
Transportation	170.00	170.00	170.00	170.00	170.00	0.00	170.00	170.00	170.00	170.00	170.00	170.00
Industry supply	136.00	136.00	136.00	136.00	136.00	0.00	136.00	136.00	136.00	136.00	136.00	136.00
Maintenance	140.00	141.00	142.00	143.00	144.00	0.00	146.00	147.00	148.00	149.00	150.00	151.00
Machine cost	120.00	127.50	135.75	144.83	90.00	0.00	135.75	140.29	145.05	120.00	112.50	105.75
Loan interest	236.75	236.75	236.75	236.75	236.75	236.75	236.75	236.75	236.75	236.75	236.75	236.75
Advertisement	50.00	50.00	50.00	50.00	50.00	0.00	50.00	50.00	50.00	50.00	50.00	50.00
Depreciation	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00
Administration cost												
Labour cost	4,828.80	4,828.80	4,828.80	4,828.80	4,828.80	0.00	4,828.80	4,828.80	4,828.80	4,828.80	4,828.80	4,828.80
Electricity	420.00	420.00	420.00	420.00	420.00	0.00	420.00	420.00	420.00	420.00	420.00	420.00
Office Stationery	15.00	15.00	15.00	15.00	15.00	0.00	15.00	15.00	15.00	15.00	15.00	15.00
Phone and Internet	57.00	57.00	57.00	57.00	57.00	0.00	57.00	57.00	57.00	57.00	57.00	57.00
Other costs												
Income tax	47086.65	47090.7	48301.16	49512.06	50696.55	0	51919.16	49509.605	48306.178	47086.65	47082.6	47078.955
Divident	0	0	0	1000	1000	0	1000	1000	1000	1000	1000	1000
Profit or loss	-23283.7	-23283.7	-22930	6424.76	6781.41	-935.745	7124.4	6415.58	6060.82	5698.305	5694.355	5690.6

Table 12. Cash flow statement 2016

Month	Opening balance	Cash inflow		Cash outflow			Closing balance
		Sales	Scrapt value	Materials	Other costs	Instalment	
Jan	110,000.00	156,780.00	175.50	96,001.50	83,920.20	1,578.28	85,455.53
Feb	85,455.53	156,780.00	189.00	101,967.00	83,933.75	1,578.28	54,945.50
Mar	54,945.50	160,800.00	203.85	108,529.05	85,154.45	1,578.28	20,687.57
Apr	20,687.57	164,820.00	220.19	115,747.31	57,376.43	1,578.28	11,025.74
May	12,025.74	168,840.00	148.50	71,770.50	58,508.10	1,578.28	48,157.37
Jun	50,157.37	0.00	0.00	0.00	556.75	1,578.28	46,022.34
Jul	48,022.34	172,860.00	203.85	108,529.05	59,780.45	1,578.28	49,198.41
Aug	52,198.41	164,820.00	212.02	112,138.18	57,377.44	1,578.28	43,136.54
Sep	47,136.54	160,800.00	220.59	115,927.76	56,180.77	1,578.28	30,470.31
Oct	35,470.31	156,780.00	175.50	96,001.50	54,938.20	1,578.28	34,907.84
Nov	40,907.84	156,780.00	162.00	90,036.00	54,928.65	1,578.28	45,306.91
Dec	52,306.91	156,780.00	149.85	84,667.05	54,920.25	1,578.28	61,071.18 [1]

Table 13. Balance sheet 2016

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Assets												
Cash	85455.53	54945.50	20687.57	11025.74	48157.37	46022.34	49198.41	43136.54	30470.31	34907.84	45306.91	61071.18
Inventory	7687.50	13714.50	23843.55	38730.86	7181.36	7181.36	9930.41	21208.58	38736.34	38797.84	32893.84	21620.89
Land and building	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00
Vehicles	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00
Machineries	125800.00	125421.00	125042.00	124663.00	124284.00	123905.00	123526.00	123147.00	122768.00	122389.00	122010.00	121631.00
Total Asset	337270.03	312408.00	287900.12	292746.60	297949.72	295435.70	300981.82	305819.12	310301.66	314421.68	318537.76	322650.08
Equity and Liability												
Equity												
Owner Investment	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00
Retained earning	190098.92	166815.23	143531.48	120601.88	127026.64	133808.04	132872.30	139996.70	146412.28	152473.10	158171.40	163865.76
Current profit	-23283.70	-23283.75	-22929.60	6424.76	6781.41	-935.75	7124.40	6415.58	6060.82	5698.30	5694.36	5690.60
Liability												
Bank loan	56818.80	55240.52	53662.24	52083.96	50505.68	48927.40	47349.12	45770.84	44192.56	42614.28	41036.00	39457.72
Total Equity and Liability	337270.03	312408.00	287900.12	292746.60	297949.72	295435.70	300981.82	305819.12	310301.66	314421.68	318537.76	322650.08

[1] Other costs include operating costs excluding depreciation, administration cost, and income tax.

Table 14. Income statement 2017

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sales	181832.00	181832.00	186320.00	190808.00	191760.00	0.00	172584.00	184008.00	179520.00	175032.00	175032.00	175032.00
Scrap value	272.75	272.75	279.48	286.21	287.64	0.00	258.88	276.01	269.28	262.55	262.55	262.55
Cost of Materials	111780.66	112308.00	115080.00	117852.00	118440.00	0.00	106596.00	113652.00	110880.00	108108.00	108108.00	108108.00
Operating expenses												
Showroom rent	320.00	320.00	320.00	320.00	320.00	120.00	320.00	320.00	320.00	320.00	320.00	320.00
Storage rent	340.00	341.00	342.00	343.00	344.00	200.00	346.00	347.00	348.00	349.00	350.00	351.00
Transportation	170.00	170.00	170.00	170.00	170.00	0.00	170.00	170.00	170.00	170.00	170.00	170.00
Industry supply	136.00	136.00	136.00	136.00	136.00	0.00	136.00	136.00	136.00	136.00	136.00	136.00
Maintenance	140.00	141.00	142.00	143.00	144.00	0.00	146.00	147.00	148.00	149.00	150.00	151.00
Machine cost	120.00	127.50	135.75	144.83	90.00	0.00	135.75	140.29	145.05	120.00	112.50	105.75
Loan interest	236.75	237.75	238.75	239.75	240.75	241.75	242.75	243.75	244.75	245.75	246.75	247.75
Advertisement	50.00	50.00	50.00	50.00	50.00	0.00	50.00	50.00	50.00	50.00	50.00	50.00
Depreciation	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00	379.00
Administration cost												
Labour cost	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66	4,973.66
Electricity	420.00	420.00	420.00	420.00	420.00	0.00	420.00	420.00	420.00	420.00	420.00	420.00
Office Stationery	15.00	15.00	15.00	15.00	15.00	0.00	15.00	15.00	15.00	15.00	15.00	15.00
Phone and Internet	57.00	57.00	57.00	57.00	57.00	0.00	57.00	57.00	57.00	57.00	57.00	57.00
Other costs												
Income tax	54631.42	54631.42	55979.84	57328.26	57614.29	0.00	51852.86	55285.20	53936.78	52588.36	52588.36	52588.36
Divident	1000.00	1000.00	1000.00	1000.00	1000.00	0.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Profit ot Loss	7335.25	6797.41	7160.48	7522.71	7653.94	-5914.41	6002.85	6948.11	6566.04	6213.77	6218.27	6222.02

Table 15. Cash flow 2017

Month	Opening balance	Cash inflow		Cash outflow			Closing balance
		Sales	Scrapt value	Materials	Other costs	Loan installment	
Jan	69071.18	181832.00	272.75	108177.30	62609.83	1578.28	78810.52
Feb	78810.52	181832.00	272.75	114899.40	62620.33	1578.28	81817.25
Mar	81817.25	186320.00	279.48	122293.71	63980.00	1578.28	80564.74
Apr	80564.74	190808.00	286.21	130427.45	65340.50	1578.28	74312.72
May	74312.72	191760.00	287.64	80873.10	65574.70	1578.28	118334.28
Jun	118334.28	0.00	0.00	0.00	5535.41	1578.28	111220.59
Jul	111220.59	172584.00	258.88	122293.71	59865.02	1578.28	100326.46
Aug	100326.46	184008.00	276.01	126360.58	63304.90	1578.28	93366.71
Sep	93366.71	179520.00	269.28	130630.79	61964.24	1578.28	78982.67
Oct	78982.67	175032.00	262.55	108177.30	60593.77	1578.28	83927.86
Nov	83927.86	175032.00	262.55	101455.20	60589.27	1578.28	95599.66
Dec	95599.66	175032.00	262.55	95405.31	60585.52	1578.28	113325.09

Table 16. Balance sheet for second year

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Assets												
Cash	78810.52	81817.25	80564.74	74312.72	118334.28	111220.59	100326.46	93366.71	78982.67	83927.86	95599.66	113325.09
Inventory	18017.55	20608.93	27822.64	40398.09	2831.19	2831.19	18528.90	31237.48	50988.28	51057.58	44404.78	31702.09
Land and building	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00	90600.00
Vehicles	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00	27727.00
Machineries	121252.00	120873.00	120494.00	120115.00	119736.00	119357.00	118978.00	118599.00	118220.00	117841.00	117462.00	117083.00
Total Asset	336407.07	341626.19	347208.38	353152.82	359228.48	351735.79	356160.36	361530.19	366517.95	371153.44	375793.44	380437.18
Equity and Liability												
Equity												
Owner Investment	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00	113636.00
Retained earning	177556.36	184891.61	191689.03	198849.50	206372.22	214026.16	208111.75	214114.60	221062.71	227628.75	233842.52	240060.80
Current profit	7335.25	6797.41	7160.48	7522.71	7653.94	-5914.41	6002.85	6948.11	6566.04	6213.77	6218.27	6222.02
Liability												
Bank loan	37879.46	36301.18	34722.90	33144.62	31566.34	29988.06	28409.78	26831.50	25253.22	23674.94	22096.66	20518.38
Total Equity and Liability	336407.07	341626.21	347208.40	353152.84	359228.50	351735.81	356160.38	361530.21	366517.97	371153.46	375793.46	380437.20

Interview with Mr Shimul Bhuiyan, the Managing Director of Shimul Textile Mills Ltd.

Q1: Hello Mr Shimul Bhuiyan. Can you briefly describe the main business of Shimul Textile?

A1: This company is a cloth manufacturing company. It mainly does the weaving process of grey fabrics for the local cloths (Sharee, Lungi, 3-piece, Voile, Poplin which are their principal clothing for ladies (80%) and men (20%) in Bangladesh). The company also weaves and processes export quality Twill and Grey Fabrics as well when it requires and sells them through Back to back L/C.

Q2: How do you evaluate the current profit margin of your company?

A2: The current profit margin of Shimul Textile is quite low (less than 3%) because the difference between the production cost and the sales price is marginal. In fact, In Bangladesh, the overall profit margin of the textile companies (those only involve in weaving fabrics) is less than 5%.

Q3: So you want to expand the company's operation in the future. Can you explain your intention in more detail?

A3: As I told earlier that the current profit margin remains low and that is why the company is planning for the expansion to a new unit of printing the weaved fabrics. In reality, the margin of the dyed and printed fabrics is better than the weaved products while the extra process is considered to be not that complicated for the company. We will mainly focus on improving the internal management of the company, building the suitable expansion strategies for the company, providing proper training for the existing and new employees, and raising fund for the new business unit with our projected sales.

Q4: What kinds of resources will Shimul Textile need to grow?

A4: At the moment, we only have enough workers in weaving field. To enter the dyeing and printing business, the company may need to recruit around 20-30 more workers, one or two more managers and technical engineer. About the financial issue, we will invest from our own budget and borrow more than 55000 EUR from bank.

Q5: I think competition in the garment industry is also a big challenge for your company. Do you consider any manufacturers as your current competitors?

A5: The Textile market of Bangladesh is highly demandable and competitive in both locally and internationally. There are thousands of textile industries in Bangladesh currently. Though the demand and competitiveness of the products and markets depend on what line/type of textile business it is. For Shimul Textile, the major competitors in the same geographical market are including: Alhaj Textile Mills Ltd, Hossain Dyeing and Printing Mills Ltd, Regent

Textile Mills Ltd and many others. These companies started the printing and dyeing business in the same market with the same pattern of products. In addition, the pricing decisions, the logistics, and the positioning of these companies heavily affect the market share and the profitability of Shimul textile.

Q6: With the new product offer, how can your company compete with others?

A6: One of the main advantages of Shimul Textile is that the company already has a good business connection and relationship with the famous wholesalers in the local market. So, I believe, this will work as a huge opportunity for the company to create a competitive market for the new offered products and to adapt with the competitors as well.

Q7: Competition is certainly a great external concern or Shimul Textile. How about the internal ones?

A7: I can say the business process is my concern. We are trying to reform the operation to make the business more efficiently.

Q8: Can you talk more about the problems in the business process?

A8: In Bangladesh, for the small and medium size companies, we so not involve the clear managing systems. The business is not divided into certain departments clearly. Therefore, it is very hard to assign and improve the mistakes to the specific people and we cannot control all the losses during the production accurately. Also, we have only one manager to check all the final products, which leads to too many defaults and costs us much effort to compensate sometimes.