

**Internship Report on**  
**“The Value Chain Analysis of Tri-Star Toothbrush and Co.”**

BRAC University  
BRAC Business School  
BBA Program  
Course Title: Internship (BUS 400)

**Internship Report on**  
**“The Value Chain Analysis of Tri-Star Toothbrush and Co.”**

**Submitted To:**

Ms. Syeda Shaharbanu Shahbazi Ahmed  
Senior Lecturer  
BRAC Business School  
BRAC University

**Submitted By:**

Arif Ahmed  
ID: 09104053  
BRAC Business School  
BRAC University

**Date of Submission: August 13, 2012**

## Letter of Transmittal

August 13, 2012

Ms Syeda Shaharbanu Shahbazi Ahmed  
Senior Lecturer  
BRAC Business School  
BRAC University  
66 Mohakhali, Dhaka 1212

**Subject: Submission of the Internship report.**

Dear Madam,

It is a matter of great pleasure for me to submit my internship report on “*Value Chain Analysis of Tri-Star Toothbrush and Co*”. I have tried my level best to fulfill the requirements of the report. I consider myself very fortunate to prepare this report under your guidance. This has been a great opportunity for me. It has provided me with a great scope of applying the gathered classroom knowledge in the practical field. During the internship period I got to know many new faces and to develop interpersonal communication skills.

I must mention here that I am extremely grateful to you for your valuable guidance and constant attention as and when required. It is worthwhile to mention that there might be some errors and mistakes in my report due to lack of experience. Therefore, I expect that you will pardon my unintentional mistakes in preparing this report. I will be pleased to answer any sort of query you think necessary as now and when needed. I am always available to share the pleasure of discussions.

Sincerely Yours,

Arif Ahmed  
ID: 09104053

## Acknowledgement

At first I want to thank almighty Allah. There are many people without the support of whom this report could not have been completed. I gracefully thank **Ms. Syeda Shaharbanu Shahbazi Ahmed**, Senior Lecturer, BRAC University, for her proper guidance and feedback. She was there whenever I needed her help and gave me opportunity to learn about this topic.

I thank the management of Tri-Star Toothbrush and Co. for allowing me to complete my internship in their organization. I am also very grateful to **Sanjib Kumar Das**, Marketing manager and **Md. Nasir Uddin Dewan**, General Manager. My special thanks go to **Md. Faruk Ahmed**, Factory Manager, and **Md. Sharfuddin**, Accounts Manager, for helping me gladly in the office even during their busiest moments.

## Table of Contents

<b>Content</b>	<b>Page</b>
• Letter of Transmittal	i
• Acknowledgement	ii
• Executive Summary	01
<b>Chapter 01: Organization Part</b>	<b>03</b>
1.1 Company Overview	04
1.2 Company's Vision	05
1.3 Company's Mission	05
1.4 Products and Services Offerings	05
1.5 Organizational Structure	06
1.6 SWOT Analysis	07
1.7 Competitor Analysis	08
<b>Chapter 02: My Job Part</b>	<b>09</b>
2.1 Nature of The Job	10
2.2 Specific Responsibilities of The Job	10
2.3 Learning Experience	11
2.4 Critical Observation and Recommendation	12
<b>Chapter 03: Project Part</b>	<b>13</b>
3.1 Introduction	14
3.2 Background of The Study	14
3.3 Objective of The Report	15
3.4 Methodology	15
3.5 Limitation	16
3.6 What is Value Chain	17
3.7 Objective of Value Chain Analysis	19
3.8 Value Chain Analysis of Tri-Star	20
3.8.1 Procurement	20
3.8.2 Manufacturing	21
3.8.3 Marketing and Outbound Logistics	24
3.8.4 Marketing Strategy	25
3.8.5 After Sales Service	27
3.8.6 Support Activities	29
Conclusion	31
Appendix	32

## Executive Summary

I have been assigned by my supervisor of internship program to prepare an intern report on value chain analysis of Tri-Star Toothbrush and Co. As I have done my internship at Tri-Star Toothbrush and Co. which is a manufacturing company, I tried to figure out whether there are any problems in value chain process of this organization and try to provide some recommendation based on my experience.

Tri-star tooth brush and co. started their journey in year 1992. At first they started to produce tooth brush now they are also producing ball point pen. They are producing tooth brush under five brand names. These are “**Mr. clean**”, “**Shupti**”, “**Sparkle**”, “**Aqua**” and “**Doremon**”. In Bangladesh there are four tooth brush company. These are **Anwar Brush Company, Matador Brush Company, Alpha Toothbrush, And Tri-Star themselves**. All these companies are producing their tooth brush by importing raw materials from foreign countries.

Tooth brush production starts with putting PP powder (Polypropylene powder) into Injection Modeling machine. Different colors are added to the PP powder. Then PP powders are pressurized in 40 degree Celsius and get the shape of the toothbrush. After getting the shape of brush, it kept into water. Then it is sent to the particle machine. Rubber is used for labeling the brush. Particle machine labels the brush by putting rubber on it. After labeling the brush by putting rubber on it, it sends the brushes to the Taffing machine. The job of Taffing machine is to adjoin brushels (filament) on the head of tooth brush. They use the silver ware to weave the brushels at the head of the brush which help to attach the brushels strongly with the brush. At this stage if they want to color the brushels they give command in the machine which is controlled by a programming system. For each design they have particular software to command the machine. After putting the filament in the brush, the brush is sent to the finishing department. Finishing machine checks the shape of the brushels whether it is put evenly or not. Finishing machine also checks the shape of the brush. If there is any damage in the brush than it directly sends the brushes to the recycle department. Recycle department cut the brush in to small pieces like the raw materials. Then these materials again use for making the brush. If there is no damage found in the brush than it sends the brushes to the packaging department.

For the packaging purpose, plastic is used. To give the plastic a brush shape, it is put into the PVC (polyvinyl chloride) forming machine. Plastics are pressurized in 24 degree Celsius to get the shape of the brush. Then brushes are put in the brush shape plastic and the machine put a company and brand named printed paper on it. Then it pressurized in the blister packaging machine and packaging part is done. After the packaging is done, the product is stored in the warehouse which is in Chock-bazaar, Dhaka.

Than company's marketing manager send it to the distributor with the help of area manager. They do have 18 area managers, 136 distributors and 110 sales representatives all over the country. The demand for the product is high in Dhaka and Chittagong divisions. They motivate distributors by giving commissions which is equal to 10 percent of the sales. Area managers also get incentives if they can fulfill the target sales. Moreover if area manager fails to meet the target sales, than in that area they do more promotional activity like they give gift card to the distributors and shopkeepers to buy products more. Area manager is responsible if distributor fails to meet the targeted sales. Area manager reports to the marketing manager and marketing manager reports to the managing directors.

# **Chapter 01:**

## ***Organization Part***



## 1.1 Company overview

Tri-star Company is one of the growing companies in the toothbrush industry in Bangladesh. It started its operation in 1992 with toothbrush business and now they adjoin with pen production. Only four Toothbrush companies exist in Bangladesh and these four companies altogether fulfill 50 to 60 percent of the total demand.

Tri-star company was started by three partners name Md. Kamal Uddin Ahmed, Md. Farid Uddin Ahmed and Md. Kayum. They started their business with equity capital of 1.5 cores and 50 lacs bank loan with interest rate of 17% .They got license throughout the process of existing government rule. Initially toothbrush was imported from China, Malaysia and India. After that Anwar group started to make toothbrush in Bangladesh for the first time in 1980s. Kamal Uddin Ahmed was inspired by the idea of Anwar Group and he also decided to start the business in toothbrush industry. Before 2009 the imported tooth brush was duty free and so the imported tooth brush price was very low. After 2009 the situation has been changed by the government policy. At that time government imposed high duty on imported toothbrush which discouraged the import. As a result now our toothbrush industry is growing as well as Tri-star. Initially Tri-star started their journey with a rented house at 53/2 in Anayatganj but from 1998 they got their own Factory in 44, 50, 50/1 Nilambar Shaha road Hajaribag, Dhaka. Tri-star Company has a net asset value of twenty crores taka in present. The company has an office area of 2500 square feet and a factory area of 1 bigha (20 katha).

When they started their operation in 1992 they could produce only 500 units a day, now they are producing 3000 unit tooth brush per hour. Tri-star Company is working hard to expand their production unit and meet the demand of the market.

## 1.2 Company's Vision

To be the market leader in the toothbrush industry within next 5 years.

## 1.3 Company's Mission

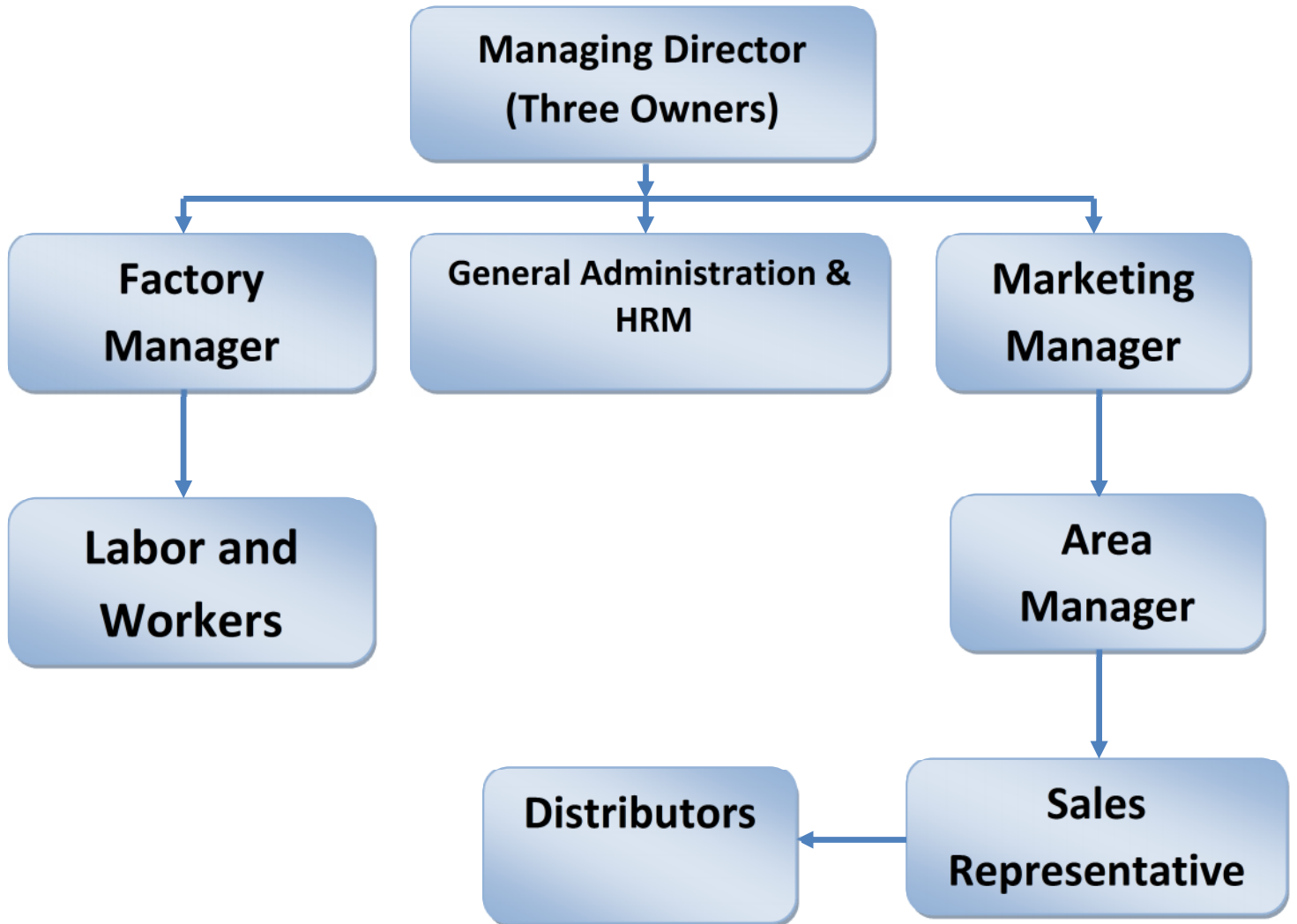
Capture the new market which has not been spotted yet and enhance the business operation to the furthest corner of the country.

## 1.4 Products and Services Offering

Tri-star is a toothbrush manufacturing company. It has five brands currently available in the market. All those brands are very popular to the customers.

<b>Tri-Star Toothbrush and Co.</b>		
<b>Brand Name</b>	<b>Price in Dozen</b>	<b>Price in Unit</b>
<b>Mr. Clean</b>	<b>144</b>	<b>12</b>
<b>Supti</b>	<b>120</b>	<b>10</b>
<b>Sparkle</b>	<b>180</b>	<b>15</b>
<b>Aqua</b>	<b>180</b>	<b>15</b>
<b>Doremon (kid)</b>	<b>264</b>	<b>22</b>

## 1.5 Organizational Structure



## 1.6 SWOT Analysis:

Tri-star toothbrush is one of the emerging companies in toothbrush industry. Every company has some strength, weakness, opportunities, threats. Strength and weakness are there internal and opportunities and threats are there external factor.

### ➤ *Strength*

Tri star toothbrush company has also some strength and weakness in their operation. They have enough capital and resources as three owners invest in this business which is a big strength for their company. They have their own factory which is run under their supervision. Moreover they have very strong brand image in the market. They also have trade mark for their brands.

### ➤ *Weakness*

However they have some weakness in their business operation like they do not have any training program and they do not have any research and development department. They do not have enough safety measures for their factory and labor and they have less promotional activities. They also use less advanced technology to make tooth brush which is a very major weakness.

### ➤ *Opportunity*

From the external side they see some opportunities like, as there are only four companies in Bangladesh and these companies are producing 50-60% brushes of total demand in Bangladesh. So in the near future there is a good opportunity for the Bangladeshi companies to grab the rest 40-50% demand. So Tri-star Company also has the chance to increase their market in the near future. Bangladeshi Government imposed high duty on imported toothbrush which brings a new era for our country in toothbrush industry. The inter relation among the toothbrush companies in Bangladesh is very well. Moreover Bangladesh has abundant cheap labor which is an opportunity for Tri-star Toothbrush Company.

### ➤ *Threat*

All the tooth brush companies in our country have been importing their raw materials from foreign countries, which is a threat for tooth brush industries in Bangladesh. As the other party is importing the raw materials they might charge extra for this service. Matador is relatively stronger and more established company compare to Tri Star Tooth brush which is threat for Tri Star Company. The price of raw materials is increasing day by day due to economic and political instability. It is also a major threat for this organization.

## 1.7 Competitor analysis:

In Bangladesh four companies produce Tooth brush. Along with Tri-Star tooth Brush & CO, Alpha tooth brush, Anwar Brush Company and Matador group also produces tooth brush. Anwar Brush Company is the oldest brush company in Bangladesh and Matador Group is the largest tooth brush company in Bangladesh. These three brush companies are the direct competitors of Tri-Star tooth Brush and Co. and there are some indirect competitors from China, Malaysia and Thailand. The price of competitors brushes are given bellow-

### Name and Price of the Competitors Product:

<b>Anwar Toothbrush</b>		<b>Alpha Toothbrush</b>		<b>Matador Toothbrush</b>		<b>Tri-Star Toothbrush</b>	
<i>Name</i>	<i>Price</i>	<i>Name</i>	<i>Price</i>	<i>Name</i>	<i>Price</i>	<i>Name</i>	<i>Price</i>
<b>Lords</b>	15	Alpha	10	Euro fresh	15	Mr. Clean	12
<b>Rubi</b>	15	Fuji	16	Roma	15	Supti	10
<b>Junior</b>	12	Aroma	10	Dino-Kid	20	Sparkle	15
		Euro star	12	Super-Flex	16	Aqua	15
				Aqua Fresh	12	Doremon	22

Though all of them are producing toothbrush in Bangladesh, the competition in the market is very different. Matador is the market leader and capturing more than 50% of the market share. Though Anwar Brush Company is the oldest, it is actually very weak and almost out of the business. It is capturing the lowest market share. Tri-Star toothbrush is the second largest in terms of market share. It is the market challenger. Alpha is the market follower. They are trying to get foot in the market.

As we can see that each and every company is actually charging almost the same price from the customer. They know that the market is very competitive and they are trying to put a reasonable price to keep up the pace with other competitors.

# **Chapter 02**

## ***My Job Part***

## **2.1 Nature / Description of the job**

Getting an internship opportunity in an organization like Tri-Star Toothbrush and Co. was a great advantage for me. I had the opportunity in the marketing department under the supervision of the marketing manager. Tri-Star is a medium sized organization which produces toothbrush in its factory. The main task of the marketing department is to distribute those products all over the country, keep communication with area managers and sales representative, find out new market for the existing product, convey informal research through distributors on the demand of the costumers' let the manufacturing unit know about the production target. Though there was a separate finance and accounts department in the organization, the marketing department is the main responsible unit to keep sales and financial data and to support Accounts manager to prepare budget forecast.

As an intern I was not given so many tasks with huge responsibility. Each and every day sales data was coming to the head office in Dhaka. I have to collect those data and to document it by area and date. I have to report back to the marketing manger as well as the finance manger about the sales figure and amount. I also have to check the finished goods when they were about to be delivered from the depot to regional office. I have to collect the letters from the regional offices mentioning the demand of finished goods from the main depot.

Sometimes I had to visit some of the regional offices inside and outside Dhaka city. I went to those offices as a representative of our marketing manager to collect necessary documents and collect data about the local market. I was involved in several activities in that organization which was very much exciting and very good learning experiences.

## **2.2 Specific Responsibilities of the Job**

- Collect the sales report from area manager and sales representative.
- Document the data regarding sales and storage
- Notify the manager about any misleading information the documents
- Observe the transportation of finished goods from storage to regional office
- Visit regional offices to perform market research

## 2.3 Learning experience

As a BBA student I had to perform an internship in a business organization. I did my internship in Tri-Star Toothbrush and Co. That was my first experience of working in professional business environment. I was very much nervous before joining in that organization. But surprisingly I found out that none of the task is that much hard. Everything was in proper order. The most important thing is to adjust with the professional work environment.

While working in that organization the most important thing I found that inter-personal communication is the most important to work in office environment. We need to communicate with different types of people from different social and cultural background. It is not easy to blend in a corporate environment so quickly. Positive attitude towards the job and responsibilities is also important. In our academic life I don't need to take any responsibility accept my study. The only gainer or loser of my performance was me. But in a office environment where each and every activities is connected with each other, one's performance affects the whole organization. In our personal we don't need to care about others but in a office environment we consider everyone's situation before taking a decision.

Hard working is the key to any success. I had to work hard in my academic career. But working in professional environment is even harder. Suddenly starting an 8-hour day job is not easy. I needed to develop a strong mental attitude for the successful performance in my internship.

Endurance is also important. Working in corporate environment can be exhaustive. We have to work with our superiors and subordinates. Not all times our performance is appreciated and sometime it is control the subordinates. But everybody must take patient approach to handle those kinds of situation.

Working three months as an intern in an organization was a very important experience for me. I believe it would help me to prepare to take the challenge of the real world.



## **2.4 Critical observation and Recommendation**

As an internee of the company in I worked with them for three months and I look over various activity and operation of the company. As a manufacturing organization it operates its activities in a planned way. I found various things of the company like,

Tri-star Toothbrush and Co. starts its office early in the morning but it takes time to start the manufacturing unit. After opening the office at 10am everyday it opens its factory and the factory starts around 11am. Within this one hour they can produce around 3000 units of products. So I think the factory should be started its operation early so they can catch up with the office hour of the organization.

Marketing and finance department doesn't have a direct communication with the factory workers. They only communicate with the factory manager. Sometimes information gets manipulated. May be the marketing manager wants a particular product for a particular area but the production unit is manufacturing something else. I think a direct communication between factory unit and other departments will be very productive for the company.

Most of the labors and workers in the factory are not educated. They have firsthand knowledge about the work they are performing. But sometimes it is really hard to make them understand about some management issues. If the management of Tri-Star hires labors and workers having a basic level of education, then it would be lot easier to maintain a professional culture inside the organization.

**Chapter 03:**  
***Value Chain Analysis of***  
***Tri-Star Toothbrush and CO.***

### **3.1 Introduction**

In Bangladesh Toothbrush manufacturing industry is new and very small in sizes, which fulfill only the 50 to 60 percent of total demand of our country. The uses of toothbrush are increasing constantly and for that the possibility of success in this industry is also rising. In Bangladesh there are four companies in toothbrush industry and one of them is Tri-Star Toothbrush Company. Anwar, Alpha, Matador are the competitors of the Tri-Star Toothbrush company and they are doing business with good understanding in the industry. This report is about value chain activities of Tri-Star Toothbrush & Co. In this report I focused about the complete value chain process of toothbrush with specific and detailed analysis and comparison. Value chain activity starts with inbound logistic/procurement and ends with after sale service. Tri-star Company was inspired by the Anwar toothbrush company and started their business from 1992. As they have a long journey in this industry, they have a good brand image in market. The raw material and the technology are imported from the abroad and by utilizing these they are producing quality product. Their Mr. clean toothbrush brand gets a huge popularity in market especially in Dhaka and Chittagong. As they are doing business successfully in toothbrush industry they are planned to expand their business operation in remote area of Bangladesh.

### **3.2 Background of the study**

With a view to familiarize a student with the modern corporate world, internship has become a mandatory for completion of the graduation in business studies. Every student enrolls themselves for a program with a vision of their ideal job which will lead them to the path of success. No one's career is that straight forward in Bangladesh. Internship can only award a student with an opportunity to propel at different positions to see which journey he enjoys most.

As a student of BBA, I had the opportunity to be an elective fellow to do my internship with the Tri-Star Toothbrush and Co. It is a manufacturing organization which produces toothbrush and sell it all over the country. As I have worked in there as an intern, it has helped me to learn how manufacturing company operates in the market. In these report, I have tried my best to portray the activities of the company based on the experience gathered with them working over 10 weeks.

### 3.3 Objective of the Report

The primary objective of this report is to fulfill the requirement of the BUS 400 (Internship) course. It is a mandatory part of this program. Every student has to submit a report based on their three months experience in an organization.

Secondary objectives are,

- To understand the value chain activities of Tri-Star Toothbrush and Co.
- To relate the academic knowledge with practical world.
- To find out how a manufacturing organization operates in the market.

### 3.4 Methodology

Data have been collected in several ways to prepare this report:

- Observation is first and strongest source of collecting information. A three months window gives me a perfect opportunity to understand its activities.
- Interview with managers of several departments
- Discussion with employees of the organization
- Relevant documents were studied as provided by the officers concerned.

### 3.5 Limitations of the report

In spite of my untiring effort, I am sure that there are still some shortcomings prevailing in the report due to:

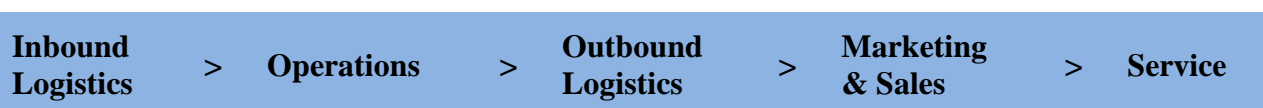
- The organization has no website.
- Lack of practical experience and capabilities in the real world
- **Lack of concentration in answering the questionnaire:** As the interviewees were quite busy, so I had difficulty in interviewing them as a result, more required information regarding the report purpose was not collected.
- **Confidentiality:** As the Tri-Star is a manufacturing company as well as small organization, information related with the company's core competencies and business functions are strictly kept safe. For this reason sometimes I don't get the actual information from the company.
- Up-to- date information were not available
- The company officials were not eager to provide any written documents.

Despite these limitations I tried my best to collect necessary data and information that have been analyzed in the subsequent section.

## 3.6 What is Value Chain?

To analyze the specific activities through which firms can create a competitive advantage, it is useful to model the firm as a chain of value-creating activities. Michael Porter identified a set of interrelated generic activities common to a wide range of firms. The resulting model is known as the **value chain** and is depicted below:

### 3.6.1 Primary Value Chain Activities



The goal of these activities is to create value that exceeds the cost of providing the product or service, thus generating a profit margin.

- **Inbound logistics** include the receiving, warehousing, and inventory control of input materials.
- **Operations** are the value-creating activities that transform the inputs into the final product.
- **Outbound logistics** are the activities required to get the finished product to the customer, including warehousing, order fulfillment, etc.
- **Marketing & Sales** are those activities associated with getting buyers to purchase the product, including channel selection, advertising, pricing, etc.
- **Service** activities are those that maintain and enhance the product's value including customer support, repair services, etc.

Any or all of these primary activities may be vital in developing a competitive advantage. For example, logistics activities are critical for a provider of distribution services, and service activities may be the key focus for a firm offering on-site maintenance contracts for office equipment.

These five categories are generic and portrayed here in a general manner. Each generic activity includes specific activities that vary by industry.

### 3.6.2 Support Activities

The primary value chain activities described above are facilitated by support activities. Porter identified four generic categories of support activities, the details of which are industry-specific.

- **Procurement** - the function of purchasing the raw materials and other inputs used in the value-creating activities.
- **Technology Development** - includes research and development, process automation, and other technology development used to support the value-chain activities.
- **Human Resource Management** - the activities associated with recruiting, development, and compensation of employees.
- **Firm Infrastructure** - includes activities such as finance, legal, quality management, etc.

Support activities often are viewed as "overhead", but some firms successfully have used them to develop a competitive advantage, for example, to develop a cost advantage through innovative management of information systems.

### 3.6.3 Value Chain Analysis

In order to better understand the activities leading to a competitive advantage, one can begin with the generic value chain and then identify the relevant firm-specific activities. Process flows can be mapped, and these flows used to isolate the individual value-creating activities.

Once the discrete activities are defined, linkages between activities should be identified. A linkage exists if the performance or cost of one activity affects that of another. Competitive advantage may be obtained by optimizing and coordinating linked activities.

The value chain also is useful in outsourcing decisions. Understanding the linkages between activities can lead to more optimal make-or-buy decisions that can result in either a cost advantage or a differentiation advantage.

### 3.7 Objectives of Value Chain analysis

Value chain, also called value stream, is a set of tools and methodologies that aims for the continuous elimination of all waste in the production process. The main benefits of this are lower production costs; increased output and shorter production lead times. More specifically, some of the goals include:

1. **Defects and wastage** - Reduce defects and unnecessary physical wastage, including excess use of raw material inputs, preventable defects, costs associated with reprocessing defective items, and unnecessary product characteristics which are not required by customers;
2. **Cycle Times** - Reduce manufacturing lead times and production cycle times by reducing waiting times between processing stages, as well as process preparation times and product/model conversion times;
3. **Inventory levels** - Minimize inventory levels at all stages of production, particularly works-in-progress between production stages. Lower inventories also mean lower working capital requirements;
4. **Labor productivity** - Improve labor productivity, both by reducing the idle time of workers and ensuring that when workers are working, they are using their effort as productively as possible (including not doing unnecessary tasks or unnecessary motions);
5. **Utilization of equipment and space** - Use equipment and manufacturing space more efficiently by eliminating bottlenecks and maximizing the rate of production through existing equipment, while minimizing machine downtime.
6. **Flexibility** - Have the ability to produce a more flexible range of products with minimum changeover costs and changeover time.
7. **Output** – Insofar as reduced cycle times, increased labor productivity and elimination of bottlenecks and machine downtime can be achieved, companies can generally significantly increased output from their existing facilities.



## **3.8 Value Chain Analysis of Tri-Star Toothbrush and Co.**

### **3.8.1 Procurement**

One of the major raw material in toothbrush making is PP powder (Polypropylene powder) and others raw materials are PP Crystal (Polypropylene Crystal), LDP (Low density polypropylene), HDP (High density polypropylene), and Thermoplastic Rubber, Filament (brushels), Silver ware and Poly-Vinyl Chloride Film. Tri-star Company purchases their raw material from Chock-Bazaar in Dhaka. Tri-star Company does not have any specific supplier. They purchase their raw material by bargaining from the local importers. These raw materials are imported in Bangladesh from Thailand, Malaysia and China. According to Md. Faruk Ahmed, factory manager of Tri-star Company, Bangladesh does not that advanced technology to produce these raw materials that is why they have to import these raw materials from abroad.

### **Recommendation on Procurement**

- It can open its own import division. It would help the company to buy directly from the overseas supplier. Sometimes it happens that the suppliers from Chock-bazaar create problems to supply raw materials properly. Sometimes raw materials are not available in the market. These kinds of problems can be solved by opening their own importing section.

### **3.8.2 Manufacturing Process**

#### **➤ Injection Modeling:**

At first they put PP powder (Polypropylene powder) in the Injection Modeling Machine which is almost like a small plastic ball. These plastic balls are of crystal color. According to the design of the brush they add different color to make the body of the toothbrush. The pressurization of the Machine of plastic balls in 40 degree Celsius is used to shape the body of the brush. Within 20 to 40 second these machine produce the shape of the body of a tooth brush. It can produce 8 toothbrushes at a time. In the injection modeling machine there is some dice which help to design the brush. They have five injection Modeling machine in their factory.

#### **➤ Particle Machine:**

In the Particle machine they set a logo on the dice and later the logo of that particular brand is added to the body of the brush. It also adds rubber to design the toothbrush. After that, the particle machine helps to add different colors of logo according to their choice. At first they put eight brushes at the middle of the machine and the brushes are held for 5 seconds to put color and logo on the brush. That means whatever work is remaining in the stage of injection modeling machine, is been completed in this particle machine. Moreover, in total it needs approximately 20 seconds to add a logo. They have 3 particle machines to make their production faster.

#### **➤ Taffing Machine:**

After the completion of the job of particle machine, next step is done by Taffing Machine. Main job of Taffing machine is to adjoin bushels on the head of tooth brush. They use the silver ware to weave the brushels at the head of the brush which help to attach the brushels strongly with the brush. The machine takes one minute to attach brushels on the five brushes. Whatever the color or design they want to add on the brushels they set on the machine, which is controlled by the PRM-850 programming system. For each design they have particular software to command the machine. They have 5 Taffing Machines in their factory. In one minute they can adjoined 25 pieces of brushes. In this production section one people control each machine. According to them this machine holds the highest price among the entire machineries they have. These machines are kept in the air conditioned room as this task is controlled by computer programming.

➤ **Finishing Machine:**

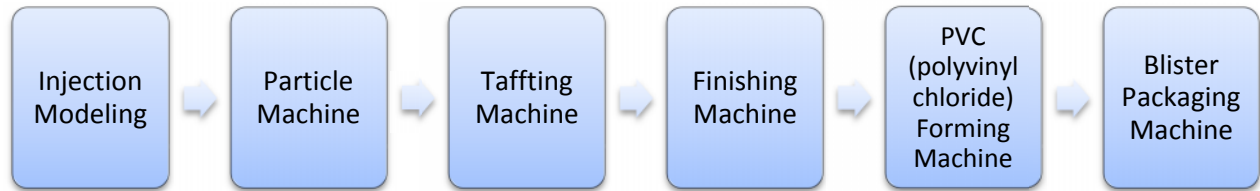
Taffting machine has some limitation like brushels of toothbrush may not be in same size or may be brushels are not in same line. For that reason to ensure the quality, finishing machine do the final touch. They have two finishing machines for that purpose and each machine sizing the brushels. These machines are able to size 100 brushels within one minute. However if machines do defect for any reasons they continue their production by manually. They have 6 workers for this department.

➤ **PVC (polyvinyl chloride) forming machine:**

For the packaging purpose at first they prepare plastic cover. Previously they collected plastic cover from their supplier which incurred huge cost and ultimately reduced profit. To solve this problem, recently they start to produce plastic cover by themselves. Tri-Star purchases the bundle of the plastic paper. At first they put the plastic paper into the PVC forming machine in 24 degree Celsius and after the 20 second it divides the paper into 8 brush shapes plastic cover. They have only one PVC forming machine.

➤ **Blister Packaging Machine:**

After the tasks of finishing machine here comes the packaging part. For that purpose, they use two Blister Packaging Machines, which help to package the toothbrush. To packages the brush they first lay down the plastic cover page. Then keep eight brushes on that shaped plastic paper and upon those brushes they put a paper which is labeled by their company name and logo. Then through the system, they send those brushes to the middle of the machine. In this process the upper side of the machine put pressure on that. And after that a package of 8 brushes comes out through the Blister packaging machine. In total it takes nearly 5 seconds to package 8 brushes. They let us know that, the logo papers are outsourced from different computer and graphic shop. They have not any fixed suppliers for that, rather they go for bargaining option to reduce cost. They let us know that if any packaging machines run out of operation or for load shedding they go for manual production. For that packaging department they have 20 workers.



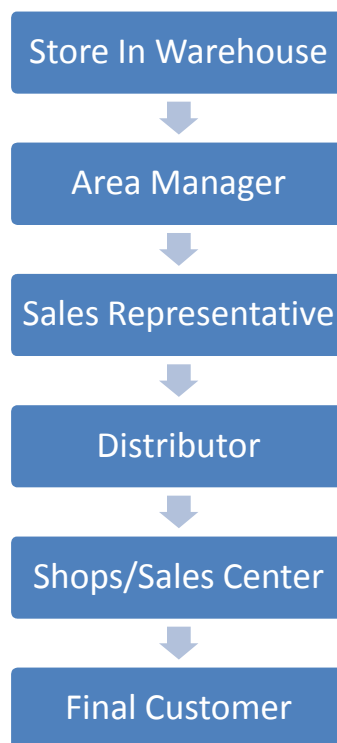
***Figure: Manufacturing Process of Toothbrush***

### **Recommendation on Manufacturing Process**

- They can use more advanced technology as like their competitors, so that they can ensure product quality and make their operation faster. Matador and Alpha has relatively more advanced and modern machinery and equipment to produce their goods. Tri-Star didn't replace its machineries which they bought in 1992. The production rate and speed can be much higher if they can get new and advanced type of equipments.
- As they use manual system in most of the production areas, the production gets slower and risk remains whether they can provide delivery on date or not. As described above, the machineries are very much old. Most of them are being run in manual system. So obviously the production rate is very slow. There is a huge market demand for toothbrush. All the four companies altogether are not able to fulfill the demand. So if the Tri-Star is able to increase the production rate by converting into auto production system it can capture new market segment.
- They run their production by electricity system. For that, if load shedding happens they need to stop their operation. They have a backup generator but it does not support for long. To solve this problem they can introduce gas system to face the situation of emergency. Matador group is also using gas based power supply to run their production.

### 3.8.3 Marketing and Outbound Logistics:

Tri-Star Tooth brush & co has its own Marketing and Outbound Logistics department which is under the authority of Marketing Manager. The main task of marketing department to make sure that the finished goods are available to remote corner of the country. It also tries to find out several marketing strategies to increase the sales of toothbrush. After packaging the products, they store those to their own warehouse. They have two warehouses; one in the factory building and other is in the Chock-bazaar. All over the Bangladesh they have 18 Area managers, 110 sales representatives and 136 distributors. In Dhaka, they have two areas managers. Sales representative gives support to the area managers to fill up their target. However under the sales representatives, they have distributors who send the product in to the local shop. Through the local shop final consumer get their product. They collect their money through pay order from the distributor. They have huge demand in Dhaka and Chittagong.



*Figure: Outbound Process of Toothbrush*

### 3.8.4. Marketing Strategy:

Marketing is one of the important activities for every company. In marketing activities Product, Price, Place and Promotion are the four important things. Now we are describing Tri- Star & Co's marketing process briefly-

#### ➤ **Product**

There are two categories of products in Tri-Star Toothbrush, these are –

- **Vertical Toothbrush:**

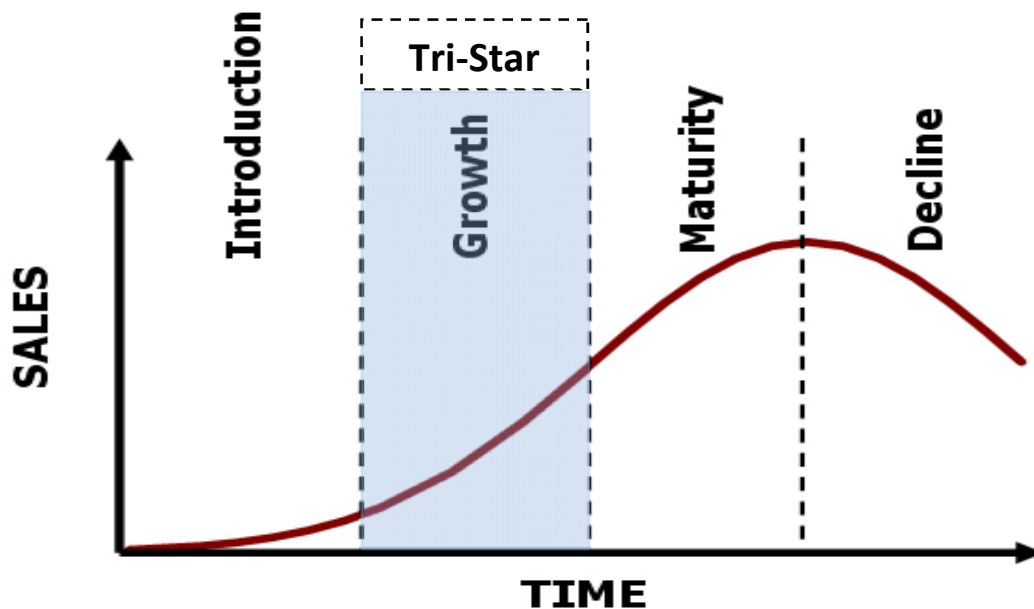
Vertical tooth brush has a bend in its body and very much flexible. This type of toothbrush is very comfortable to use for crooked teeth because it can take shape according to mouth and teeth. The temperature required to make this kind of toothbrush is different than horizontal toothbrush.

- **Horizontal Toothbrush:**

This kind of toothbrush is straight and very strong. It doesn't take any kind of shape and not flexible. This kind of toothbrush is comfortable to wash straight type of teeth. The manufacture of this kind of toothbrush is easy compared to vertical toothbrush.

Tri-Star Toothbrush and Co. is actually following the product differentiation strategy. They have different types of toothbrush with different feature. Toothbrush is fast moving consumer goods (FMCG) and it is a very low price product compare to other consumer goods. People have lot of options it buy a toothbrush because in market there are lot of brands. So product differentiation strategy is very good way to grab the market in the long run. They have different types of colors, sizes and shapes for toothbrush. Customers can choice among variety of products. Recently they have introduced "Doremon" brand toothbrush for kids.

According to the quality of brushels, the toothbrushes are soft and super soft. Tri-Star toothbrush is operating their business for 20 years and now they are producing 24000 pieces of toothbrushes per day. According to Md. Farid Uddin Ahmed, Tri-Star in growth stage now. In this stage, they have huge sales revenue and low production cost. As they have huge demand for their product in Bangladeshi market, they are producing maximum amount of product by using their machinery. At this point, they are trying to fulfill the demand of the market with their three competitors.



*Figure: Product Life Cycle*

### ➤ Price

TRI-STAR & CO follows **market penetration pricing** strategy where it sets low prices of the toothbrush so that they can attract more buyers and capture the mass market. As there is huge demand in Bangladesh markets so that they are charging low prices and also doing monopoly business in some small areas. As they produce a huge amount of product, they can lower down their fixed cost. All the companies in this industry are actually following the same pricing strategy. They all are charging low price to attract the customer. Considering from that point of view their pricing strategy can also be called **competitor based pricing strategy** or **going rate pricing** strategy. In this strategy they follow going rate of what competitors are charging.

For selecting their pricing strategies they follow competitor based pricing strategies. They use going rate pricing strategies which means to set the price what the competitors are charging. As this industry is very small in Bangladesh, Tri-star maintains good relationship with its competitors. If they could not maintain the good relationships with its competitors then competitors might easily grab their market by reducing the price further. They have 30 to 32 categories under five brands of brush which prices vary according to the quality of brushels.

### ➤ **Place**

TRI-STAR & CO mainly distribute their product many areas in our country. Their products are found almost all areas like Dhaka, Chittagong, Khulna, Camilla, and Barisal. The demand of the product is very high in Dhaka and Chittagong rather than other districts. They have 110 sales representative and 136 distributors all over the country. According to the marketing manager the company always makes sure that no shop in the country is allowed to maintain a single day without their product.

### ➤ **Promotion**

TRI-STAR & CO uses direct marketing with their distributors and customers. They have their specific distributors who are supplying their product to customer. They have their own sales representatives especially in Dhaka who sales their brush only. Mainly they are using **commission based promotion** to promote their product. Distributors get 10 percent commissions to distribute their product. They use another kind of special promotional program called **gift card**. If a shopkeeper purchases a specific amount of product, they will get this gift card. It actually includes several types of gifts like TV and electronics equipment like mobile handset. They used to air TVC advertisement for promotion when they first launched their products. Now a day's their company is very popular to customers so that they do not use this media. Other than that they do not use any advertising media for promotion. In some area, they are doing monopoly business so that they don't go for any promotional activities.

### **3.8.5 After Sales service:**

After sales service is also a major part of the value chain activities. Though Tri-Star Toothbrush & Co is a big company, consumers do not need after sales services because it is a fast moving consumer good (FMCG) with a very short span of life



## **Recommendation on Marketing and Outbound Logistics**

- They can increase promotional activities such as Billboard, newspaper, magazine and use some other media like radio. So they can get attraction and could be able to increase the number of customers. They can also go for opening a web site so that customer can get information about their product and buyers can also contract with them easily. They can also go for online advertisement like face book. We think by these ways they could able to increase their sales volume and revenue.
  
- They can increase their distribution channel in other areas so that they can capture more market share and fulfill their vision of becoming market leader. Tri-Star has covered almost all the areas of the country. But they are unable to supply the enough amount of product to fulfill the market demand. So it can set up factories in some other areas of the country. This will eventually help them to cut down supply chain cost.
  
- They have no specific R&D department for their factory. They do not perform any market research before launching any new product. If product is not accepted by target customer they might face a huge loss.

### **3.8.6 Support Activities:**

#### **➤ Human Resource Management:**

TRI-STAR & CO has strong human resource management system. Three partners are jointly involved to manage people and they also take decision to recruit any employee in management team. In management team, they have two factory managers, an Accounts manager and a marketing manager. In marketing department, they have 18 area managers under the marketing managers and they have 110 sales representatives to support the area managers. Also they have 136 distributors under the area managers to distribute the products. They have 100 labors in their factory. Factory managers control their labors in the factory. In every district, they have either their own sales representative or distributors. They have no training program for the employees. The new labors have to learn from the fellow workers by watching and performing. For this reason the wastage level for the new workers and labors is very high.

#### **➤ General Administration:**

General administration basically deals with general management, safety and security issue, accounting information, rules and regulation etc of the company. Tri Star Tooth Brush Company basically keeps their account information manually and they do not use any software for keeping those record. In term of safety case they do not use so much safety equipments for their employee. They have one fire exit and use only one fire extinguisher, but they give safety training to their employees to protect themselves from sudden accidents. This company uses their only one generator for their uninterrupted production.

## **Recommendation on Support Activities**

- If they don't go for gas based power supply system, they should use one more generator for back up of the existing generator. As they have only one generator, sometimes due to technical problem in the generator they need to stop their operation.
- As they go for manual production, it takes a huge the time complete the production cycle so the quality of the product can't be maintained always. It would be better if they convert their production process in automated manner.
- They should be more conscious about their safety. Because they have not any safety measures for workers, employees and even for factory. They only have insurance for the warehouse. So we think they can go for insurance facility for their factory and employees as well. Moreover they must have at least a few number of extinguisher facility if fire takes place in factory.
- They have no particular training program for their employees and worker. So that sometimes the unskilled worker make mistake in production process and increase wastage of raw material. Moreover the wage structure is not very popular in the factory. For that reason when worker get skilled they quit their job. For this high turnover Tri-star needs to recruit quite a few times in the year which needs time and resources as well.

## Conclusion

Tri-star & Co is one of the growing companies in the toothbrush industry in Bangladesh. Though they are now market challenger in this industry, they have huge opportunity to become market leader within next few years. For example they have recently introduced “Doremon” branded tooth brush for children, and it is expected to grab a huge market share. Now they produce three thousands units of brushes with 6 modern machine in every hour and in future they are thinking that they will expand their operation by introducing more modern technology like their competitor. Throughout out their 136 distributors, they reached their product to end users around all over the Bangladesh. They have good relation with their competitors which help to retain their current market share. As they target mostly on rural area so they have probability to get competitive advantage over competitors. In future they want to introduce more differentiated product line by focusing on customer group by introducing popular and innovative brands. They also want to introduce more quality brush like foreign established brands (Oral-B, Colgate) in near future. They are more committed to ensure and maintain quality which helps to create trusts among consumers. Therefore if the production facility is maintained properly they will able to reduce cost and to reach high profit and ultimately become market leader by introducing innovative product.

## Appendix

### SWOT Analysis of Tri-Star Toothbrush and Co.

<p><b><u>Strengths</u></b></p> <ol style="list-style-type: none"><li>1. They have enough capital and resources.</li><li>2. They have a very good brand image in the market.</li><li>3. They have their own factory.</li></ol>	<p><b><u>Weakness</u></b></p> <ol style="list-style-type: none"><li>1. Their technology is age old.</li><li>2. They have not any training program for existing employee.</li><li>3. They do not have that much safety measure for the factory building and labor.</li><li>4. They have to buy raw materials from other imported sources.</li><li>5. They do not have any research development for the marketing and production.</li><li>6. They have very less promotional activities.</li></ol>
<p><b><u>Opportunity</u></b></p> <ol style="list-style-type: none"><li>1. The market demand is very high as all the companies in this industry are not able to fulfill the total demand.</li><li>2. Government imposed a very heavy duty on imported toothbrush.</li><li>3. They have good understanding with other competitors in terms business ethics.</li><li>4. Labor is very cheap in our country.</li></ol>	<p><b><u>Threat</u></b></p> <ol style="list-style-type: none"><li>1. Matador is expanding market share with a very good speed.</li><li>2. Price of raw materials is increasing every year.</li></ol>

Products of Tri-Star Toothbrush and Co.



Raw Materials of Toothbrush



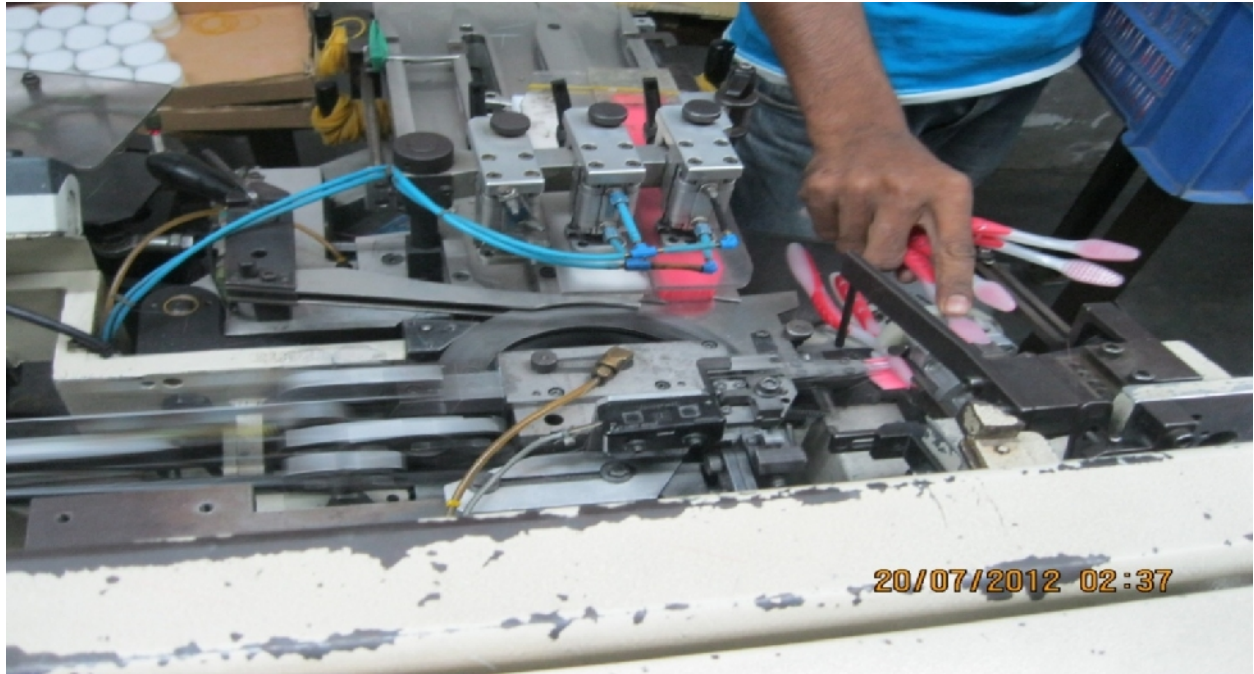


**Image: Injection Modeling Machine**



**Image: Particle Machine**





**Image: Taffing Machine**



**Image: Finishing Machine**



**Image: PVC (Polyvinyl Chloride) Forming Machine**



**Image: Blister Packaging Machine**

**THE END**