Elin Electronics Limited

Plot No L 84, Verna Industrial Estate, Verna, Goa

INTERNSHIP REPORT

(16th May 2022 to 8th July 2022)

Goa Business School

Taleigao Plateau, Goa.

Submitted by:

Crystal D'costa (2110)

Department of Business Administration

Goa Business School

Goa University, Taleigao-Goa.

Declaration

I hereby declare that this internship report submitted by me to Goa Business School towards partial fulfilment of the degree of Master of Business Administration is a record of original project work carried out by me. This work has not been submitted to any other Institution for any other degree/diploma/certificate in this university or any other University of India or abroad.

Date: 13th July 2022 Name: Crystal D'costa

Place: Taleigao Roll No.: 2110

Acknowledgement

The internship opportunity I had with Elin Electronics Limited was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many experienced people and professionals who led me through this internship period.

I would like to use this opportunity to express my deepest gratitude to Mr. Puneet Baranwal, General Manager of Operations, who in spite of being extremely busy with his duties, took time out to hear, guide and keep me on the correct path and allowed me to carry out my project at their esteemed organisation during the training.

I would also like to convey my heartiest thanks to Mr. Eknath Naik, HR officer, who heartily welcomed me for the internship and guided and encouraged me through the summer training.

I express my deepest thanks to Mr. Prasad Albuquerque, Departmental Head, Audio for taking part in useful decisions and giving necessary advice and guidance and also for arranging all facilities to make the training experience easier. I choose this moment to acknowledge his contribution gratefully.

Lastly, I would like to thank all the department heads and the staff for their careful and precious guidance which were extremely valuable for my study both theoretically and practically.

Internship Certificate

ELIN ELECTRONICS LIMITED

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Date:09.07.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Crystal D' costa** student of MBA, 2nd Semester from Goa University, Taleigoa Plateau, Goa has undergone In-plant training in our Company from 16th May 2022 to 8th July 2022 for the period of eight weeks.

During her training period she was sincere, hardworking and was involved in learning process of day to day functions of the Company.

We wish her success in her future endeavors.

For **Elin Electronics Ltd**

H. R. Officer

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Executive summary

This report summarizes my internship program from 16th May to 8th July 2022 covering 8 weeks of on-going internship towards partial fulfilment for the degree of Master of Business Administration in Elin Electronics Limited, Verna that provides electronic manufacturing services to OEM (original equipment manufacturing) customers. It includes the background of the company along with the services and products offered by them.

The industry that it operates in which is Plastic manufacturing industry has been analysed using Porter's Five force Analysis to understand their competitive positioning in the market and PESTLE analysis has been conducted to study the potential changes that could take place in the environment in order to grow and develop the business.

As the main purpose of this internship is to learn by working in a practical environment and to apply the knowledge acquired by me in this course, the company has been analysed using SWOT analysis to know their overall strategic position and VRIN analysis to know those resources and capabilities that will give them a sustainable competitive advantage.

This report also includes a detailed study on the functioning of the departments of Store, Production, Planning, HR, Accounts, Quality, EDP, Moulding, Audio and Purchase department.

It is concluded with the learnings derived by me after interning in Elin and applying what was learned in the course to the functioning of the company along with my perception about how certain aspects of the company are pragmatic and how they can be further developed.

Company Profile:

Elin Electronics Ltd., is an ISO 9001, ISO 14001 & IATF 16949 certified company. It is a flagship company of Elin Group, promoted by the "Sethia" family. Elin was established in 1969 at DELHI / NCR. It offers various products and services to its OEM customers. Elin is a one-stop solution provider and offers Electronic Manufacturing Services, Design & Manufacturing of Electric Motors, Tools/Moulds/Dies, Domestic Kitchen Appliances, Personal Care Products, Lighting Products & Automotive Components. Elin is India's largest Fractional Horse Power (FHP) Motors Manufacturer for Mixer Grinders, Juicer Mixer Grinders, Hand Blenders, Ventilation Fans, Table Pedestal Wall Fans, Kitchen Chimneys, Wet Grinders, Air Conditioners & Air Cooler (Synchronous Motors), Personal Fans, Room Heaters.

Design

Elin team works on ODM concept and offers Design and Development services of Domestic Kitchen Appliances, Motors, Tools & other products. With over 50 years of existence, the company offers cost-effective design solutions & supplies various finished products by utilizing an experienced team and modern software tools & infrastructure facilities.

Manufacturing

Elin has three manufacturing plants located at Ghaziabad (NCR), Baddi (HP) & Goa with the following infrastructure facilities & manufacturing capacities:

- Injection Moulding (149 Moulding Machines – Up to 700 Tons Machines)
- Press Shop (105 Press Machines – Up to 250 Tons Machines)
- Die Casting (6 Machines –Up to 450 Tons Machines)
- Universal Motors Manufacturing – 6 million Motors manufacturing capacity per Year
- Induction Motors for Fan Industry (FHP motors) – 3.4 million Motors manufacturing capacity per Year
- Chimney Motor / Wet Grinder Motor– .6 million Motors manufacturing capacity per Year

- Mixer Grinders & Hand Blenders – 2.40 million Unit assembly per Year
- Dry Irons & Steam Irons – 3.00 million Units assembly per Year
- Ceiling Fan & Fresh Air Fans – 1.50 million Units assembly per Year
- LED Lighting Products – 20.00 million Units manufacturing per Year
- EMS / SMT Facility (6,00,000 CPH)
- Tool Room & with Tool Design Facilities –including MFA (350 Moulds / Dies per Year)
- Powder Coating & Liquid Painting (3 Lines).

Industry Analysis

The Plastic industry in India has been one of the major contributors of growth and development for various sectors such as automotive, construction, electronics etc. Today, the plastic processing sector comprises over 30,000 units involved in producing a variety of items. It has gained notable importance in different spheres of activity with an increasing per capita consumption. One of the most common plastic manufacturing processes is Injection moulding which is used to manufacture a variety of products varying greatly in size, complexity, and application. Moulding is a manufacturing process that is used in several industries to shape a molten material into a fixed frame. In today's times, plastic is widely used as molten material because it provides an economical option to manufacture products in bulk and this is the main manufacturing process employed by Elin as well.

I. PESTLE Analysis

A PESTEL analysis is a strategic framework commonly used to evaluate the business environment in which a firm operates.

- Political factors – They play a significant role in determining the factors that can impact Elin Electronics Limited's long-term profitability in the Indian market. Elin is operating in the Plastic manufacturing industry in many states and this exposes them to different types of political

environment and political system risks. Political stability in the country's economy is important for the Plastic manufacturing sector. There has been a positive Bureaucracy and interference in this industry by the government through initiatives such as Make in India, Skill India, Digital India, Swachh Bharat Abhiyan which are opening up opportunities for accelerated growth in the plastics industry since this industry is contributing in a big way to the success of these programs. Presently, plastic components required for the production of electronic gadgets are mostly imported in the country but through the digital India program, in the next 5 to 10 years, most of the products in the electronics industry are proposed to be made in the country. This will not only reduce the imports from China and other countries but will also turn India into an emerging sourcing hub. The Indian government has taken various industry-friendly policy initiatives such as deregulating the petrochemical sector and allowing 100% FDI under the automatic route to facilitate fresh investments. The government has also introduced a scheme for setting up Centres of Excellence (CoEs) to improve the existing petrochemical technology and research environment in the country. This step is aimed at promoting the development of new applications of polymers and plastics in the country. In addition, a total of 23 Central Institute of Plastics Engineering & Technology (CIPET)have been approved to facilitate technology and financial collaboration for imparting employability skills in chemicals and petrochemicals sector.

- The economic factors -Elin can use country’s economic factor such as growth rate, inflation & industry’s economic indicators such as industry’s growth rate, consumer spending etc to forecast the growth trajectory of not only this sector but also that of the organization. The growth rate of the Indian plastics industry is one of the highest in the world, with plastics consumption growing at 16% per annum (compared to 10% p.a. in China and around 2.5% p.a. in the UK). With a growing middle class (currently estimated at 50 million) and a low per capita consumption of plastics, currently 8kg per head, this trend is likely to continue. The industry is also facing a shortage of both skilled and unskilled labour. The exchange rates and stability of rupee currency is also impacting the imports of raw materials for the industry. The inflation rate in India as of 2021 was 5.56% and if the consumer goods continue to get more expensive, the demand for non-essential goods like plastic products and electronic items will decrease and affect the industry as well. High inflation will also affect the supply chain as suppliers may go out of business or face difficulties acquiring the same goods as they did before since it will become difficult to find them and it will cost more too.

- Social factors-Society's culture and way of doing things impact the culture of an organization in an environment. Shared beliefs and attitudes of the population play a great role in how marketers will understand the customers of a given market and how they design the marketing message for their consumers. The demographics and skill level of the population is important as this industry relies more on skilled labour and is currently facing shortages in it. The entrepreneurial spirit and broader nature of the society also has to be considered since this is a plastic manufacturing industry which tends to face many environmental issues and therefore the attitudes with respect to health and environmental consciousness needs to be studied as well.

- Technological factors -A firm should not only do technological analysis of the industry but also the speed at which technology disrupts that industry. Slow speed will give more time while fast speed of technological disruption may give a firm little time to cope and be profitable. The infrastructure quality in the Plastic manufacturing industry is improving because despite India having a population of 1.15 billion and a work force of 467 million, plastics companies have reported problems with labour shortages and this has led to increased investment in technology such as automation and conveyor belt systems. This will also impact their cost structure and their value chain structure.

- Environmental factors-Different markets have different norms or environmental standards which can impact the profitability of an organization in those markets. Even within a country often states can have different environmental laws and liability laws. Since this is a plastic manufacturing industry, they are required to pay thorough attention to the environmental requirements. Some of the laws in this industry stress on measures that must be taken to minimize generation of plastic waste like segregation of plastic waste at source in accordance with the Solid Waste Management Rules, 2000 must be done and this segregated waste must be handover to urban local body or gram panchayat or agencies appointed by them or registered waste pickers', registered recyclers or waste collection agencies. All institutional generators of plastic waste must segregate and store the waste generated by them in accordance with the Municipal Solid

Waste (Management and Handling) Rules, 2000 and must handover segregated wastes to authorized waste processing or disposal facilities or deposition centres either on its own or through the authorized waste collection agency. With respect to air and water pollution regulations in the industry, there are several types of policy control that are either currently in place or in process of being introduced. This ranges from taxation, to deposit-refund systems, to outright banning manufacture of certain plastics. Some of the other environmental acts include the Water (Prevention And Control Of Pollution) Act- 1974 which is normally applicable after 20 employees and even a generator in the establishment can make The Air (Prevention and Control of Pollution) Act- 1981 applicable on the establishment. These Acts provides Central & State Boards for the Prevention and Control of pollution for air and water. The Environment Protection Act empowers the Central Government to protect and improve environment. These Acts prohibits industries to spread pollution. The industries are bound to discharge any pollutant within standards prescribed for those pollutants. They also carry many precautionary regulations for safety against pollution. The industries have to take no objection certificates from Pollution Board (normally State Board). The refusal and withdrawal of these "No Objection Certificates" by Pollution Boards can even lead to close of industry. When it comes to Attitudes towards support of renewable energy, since there is shortage of skilled labour, the plastics industry is also facing the problem of a nationwide power deficit and the electricity demand deficit is 12-13 per cent. This provides excellent opportunities for firms offering energy saving solutions, power saving machines and ancillary equipment.

- Legal Factors -The legal framework and institutions are not robust enough to protect the intellectual property rights of an organization. A firm should carefully evaluate all these factors to have an overall competitive edge like the Anti-trust law in Plastics industry and overall, in the country, copyright, patents / Intellectual property law, employment law, health and safety law. Other than this the Extended producer responsibility (EPR) holds Injection Plastic moulding business owners accountable for the environmental damage caused due to their product or any process of production. It encourages manufacturers to build sustainable products which are resource-efficient. The Plastic Waste Management Act regulates EPR Action Plan for plastic waste management is to be submitted by producers/Importers or brand owners who are operative in more than two states in order to acquire consent from the central pollution control board. It is required for producers/Importers or brand owners of injection plastic moulding business to meet the extended producers' responsibility in all the

States/Union territories where they are planning to sell their products. Pollution NOC is a mandate for entities prone to excessive emission of pollutants. Thus, it is also mandatory for Plastic Raw Material manufacturers and it is granted by Pollution Control Board situated in the respective state. Fire NOC is a certificate granted by the Fire department of the concerned Fire department after inspecting and validating the building's fire assistance and the machines installed to avoid fire-related accidents.

II. Porters 5 force analysis

The five forces (rivalry, power of suppliers, power of customers, new entrants, substitutes) are not macro factors such as those described in the PEST model (political, economic, social and technological), rather they are micro-factors much closer to a business. The forces are likely to have an immediate effect on the company and influence its ability to serve its customers and make a profit.

- Industry rivalry: The central force, the one that is usually in the face of every business, is the rivalry that exists with other competitors in the market. Presently they do not have any rivalry existing in the market as each of the other plastic manufacturers have an established source of business revenue and they do not target each other's customers. They should at the same time build a sustainable differentiation for their products, try building economies of scale to compete better or collaborate with their competitors to increase their market size in order to compete with any potential rivals.

- Suppliers: Large and monopolistic suppliers can have a huge influence on competitiveness. In order to have a smooth flow in the supply chain they invite quotations from suppliers beforehand and then choose a supplier most suited to their business and after deciding on the terms and prices only then they place the orders. They should also build an efficient supply chain with multiple suppliers or try developing new product designs using different materials so that if the prices go up of one raw material, then they can shift to another.

- Threat of substitutes: A company's competitive position can be weakened by substitutes. There is a threat of substitutes as there are other firms

producing similar products and having similar infrastructure. They should also be service oriented rather than just product oriented while understanding the core need of their customers rather than only what they purchase. They should also work on increasing the switching costs for their customers so that they are discouraged from switching to substitutes.

- Threat of new entrants: The cosy position enjoyed by suppliers to a market can be disrupted by new players. Since they aren't a diversified player in the plastic manufacturing industry the threat of new entrants is more on the higher side but at the same time the cost of setting up a new plant would be high cause of the technology involved and this would act as a discouraging factor to new entrants. They should focus on innovating new products that will bring new customers and also give their old customer a reason to buy more of their products. They should build economies of scale and bring down their per unit cost.

- Bargaining power of buyers: In some markets there are a limited number of large buyers who can dictate prices and terms. In this business their customer base includes customer companies that have a wide range of suppliers available to them cause of which the customers have a higher bargaining power. They should make their customer base larger in order to decrease their bargaining power and increase their product offerings as well so that existing customers don't go to their competitors.

Company analysis

I. VRIN analysis

The VRIN analysis for Elin is essential since it assists in offering an insight into the sustainable competitive advantage of the company. It involves assessing the internal resources of the company to evaluate its competitive edge.

- Elin electronics limited international presence is a competitive disadvantage in the lens of the VRIN/VRIO analysis framework, which assesses resources and capabilities based on Value, Rarity, Imperfect Imitability, Organization (VRIO), and Non-substitutability (N in the VRIN

test) to support strategic planning processes. This disadvantage stems from the company's strategic focus on the domestic market, particularly in Goa. Thus, their value chain's potential is limited in providing satisfactory customer service to more markets internationally.

- The VRIN/VRIO analysis presents Elin's product innovation as strategically valuable. However, this capability provides only competitive equality or parity, relative to other firms, which have their respective product innovation resources and capabilities. This innovative capability relates to their organizational culture, which value the satisfaction of customers whose preferences change over time.
- Their supply chain is valuable, but rare only among smaller competitors. Such a condition makes this supply chain a non-core competency in the resource-based view of the business. Even though the supply chain supports the company's value chain, it does not completely differentiate operations from other businesses in the manufacturing industry.
- Given the customer centricity of its value chain, the company can diversify to other services and products that complement its existing operations. In the resource-based view, these capabilities are based on Elin' resources that support new business operations as extension of the existing value chain.

II. SWOT analysis

i. Strengths

- Every day the production report is prepared and this helps them to keep a check and see that targets are met of every department individually.
- Hourly machine output is noted down every day along with it cycle time for machines in the moulding department and their total output per day as this helps to make sure the machines are running efficiently.
- The factory is located in Verna Industrial Estate providing it a good location for getting recognition in the industrial estate. It is located at the entrance of the estate making it easier in terms of accessibility.

- They are equipped to quicky adapt to the sudden changes in environment like in the case of covid 19 pandemic where they utilised their idle assets for producing covid testing kits and increased their revenue.
- Since the machines and land costs of setting up a new plant are high this act as barriers to entry for potential competitors.
- They have an experience of 50 plus years in this industry, giving them an edge over other new established business.
- They have a good brand image in the market because of their expertise and deliverance of quality products.

ii. Weakness

- The component names aren't standardised/uniform and at times makes it difficult for identification specially for a person who joins new and isn't familiar with operations.
- There will be a high cost of replacing existing experts within the company as some employees are responsible for the knowledge base in terms of production details and replacing them will be extremely difficult if a sudden unavoidable situation arises.
- This is a commoditized market and even if they are consistently good with how they provide their products and there is still very little differentiation among different service providers. As such, it is important for them to develop a strong brand name for themself from the onset of operations in order to ensure a predictable stream of revenue.
- They aren't a diversified player and as the economy changes, the spending patterns of people change. Diversifying into a number of industries or product lines can help create a balance for them during these ups and downs.

iii. Opportunity

- Since they are located in the industrial estate there are many other OEM companies that manufacture electronic products, home appliances and electricals that they could target in order to increase their customer base.
- The firm should continually upgrade their existing equipment in order to handle more complex and larger orders. The ongoing acquisition of additional equipment will also allow for more frequent and larger orders to process on an ongoing basis.

iv. Threat

- There are more businesses producing similar products like Modern Plastics and Vignesh Polymers who at present share the work load through outsourcing and job work as well as at times and supply raw materials to them too but due to an uncertain and competitive work environment there is a possibility of them turning to potential competitors.
- Technology is always changing in the field of manufacturing and as an operator of an injection moulding service they are going to need to keep a close watch on the type of technology that is used in conjunction with plastics manufacturing. However, as they have been a mainstay of the overall manufacturing industry for the past 50 plus years. As such, technological advances are well known and can be adapted to quickly by them.

Departmental Analysis

- Store department

The store department connects all the other departments as the materials required for production as well as daily consumables for office use are taken care of by them and it is also responsible for amendment and approval. Their function is to receive all the materials in inward stores and maintain Inward. They prepare SRV (store receive voucher) as per challan/ invoice/Bill and carry out physical verification against SRV. Materials which are in AQL (acceptable quality limit) list and critical list are offered to MQA for inspection. If the material is accepted by MQA, then they deposit the material in the bounded stores and update record in tally. They store the material in respective locations /bins in such a manner as to facilitate FIFO (first in first out). They also issue the materials against stores requisition slip/ work order while job work materials is issued through PPC department. Along with this they have to also ensure issue of materials through issue sticker for kits where for short materials they raise short issue slip and then upload record on tally. Items are reordered keeping in mind that they should not be ordered more than one month's requirement or as per the minimum order quantity. They send material with SRV to MQA with SRV as reference. Monthly stock report is sent to PPC with stock statement as reference and material issuance is sent to concerned production department with issue sheet as reference.

- Audio department

The audio department produces radio sets for Phillips and unlike other departments which produce only parts/ components, they make and assemble a complete radio set. They make use of assembly line production which utilises automated fixed sequences in order to make large amounts of similar products (radios). Each assembly line has a set 12-18 workers and are given a target of 800-1000 items per day. Each assembly line has a separate supervisor to see that targets are met to see that targets are achieved as well as to provide training to new employees. Every customer company has a separate assembly line for their products.eg. For Phillips (radio) the component parts come from different departments like moulding, painting and printing department and all these are assembled to make a finished product. to make a finished radio. There are 2 quality checks in between the assembly line so that if it fails quality check then it can be sent for repairing and after this all is completed then it sent for packaging. Every product has a unique identification code which includes the year, month initial of operator and this is updated on their records

Every month they have to submit a production report to show how much was planned and how much was achieved in terms of quantity. This is done daily wise too. Every customer company has its own targets set and if it doesn't match then the reasons for it need to be disclosed. This report includes division of quantity and how much is sent to each of the states. Ready product boxes are scanned day wise to find out how many are ready to be dispatched and they are dispatched when the planned lot size target is achieved. When more than planned is achieved, this is shown as finished good closing and carried forward to next month opening.

- Moulding department

The moulding department consists of stationed machines and manpower that operate these machines. There are around 46 components made for different companies. When raw materials for the moulding department arrive, there are quality checks done on them by the IQA department and rejections if any are kept aside. The planning department coordinates with the moulding department and every month they plan a tentative production unit number and decide how much to make per day and then every day they'll inform the departments how much is

expected to be produced. In every machine there is a input section where raw materials are entered and these will be moulded into the final component which again is part of some other component, as Elin only makes components or parts of the main product which will be sent to the customer company who will assemble it as a whole example: fan blade, light tube ,fascia base washer dryer .To keep a track on daily production, they find out cycle time and units produced every hour twice a day during the first and second half of the day of every machine.

- Production department

The production manager department head is responsible for control implementation and compliance. The main function is to convert their raw materials to outputs and make sure that no issues occur during this process. They work closely with the purchase department and the quality department. Their production or working capacity is highest during the months of September to December or before since during these times of festivals the sales are highest of consumer goods and therefore production to cope up with these sales is the highest and this often requires overtime or work on Sundays too to complete these targets. Production is released by them batchwise. They make use of RPO (release production order) from transfer of components across departments as well as for components dispatched from the company. An RPO includes all the items that will be required for that component to be made and this comes from the store and the combination of these materials are called kits. When items are going out in RPO, the cost price will then be added by the accounts department.

- HRM department

When it comes to recruitment of assembly line workers or factory workers, they make use of contractual source of recruitment. The interview process for them consists of questions on their background like where they worked previously, for how long and why did they leave it. This interview is conducted by the departmental in charge directly. When and how much workers are required is decided based upon the workload requirement and they also terminate workers based on it. Workload requirement is more usually during the time of festive seasonal months as sales of consumer goods like washing machine is highest during that time and production will be highest too, so they hire more workers during this time. The housekeeping staff and their duties is taken care of by the HR department as well. They have to check on daily absenteeism and also make

sure that a healthy work environment is maintained in the company. In case of any human resource grievances, the HR manager finds suitable solution keeping in mind the goodwill of the employee as well as the company. They have to make sure that housekeeping is well placed within the factory premises. Along with this they take care of any legal compliances as well as provide training to employees on mock drill, fire escapes, first aid, firefighting, use of fire extinguisher every 6 months. This is given only to the safety committee who then educate the other employees about the basics. The also take care of salary payments which needs to be done before 7th of every month. The HR department also conduct interviews and goes to legal departments of the government related to labour and GIDC and handle any pending compliances that may arise.

- Accounting department

First the customer company will place order of what the need (component part). Then purchase department will decide on what raw materials they need for it and invite quotations from suppliers for them. Criteria would include quality, price, transportation etc. After the material is dispatched from the supplier and sent to Elin, entry is done after they are received at the gate. Then quality check is done on them and sent to the purchase department who will only check if the quantity is right and then send it to store who will prepare an SRV bill (store receive voucher) and send it to accounts department who check receive details, GST invoice number, CGST, IGST and SGST. They also pay attention to payments that need to be done to suppliers according to the credit period term which can range from 30 days,90 days, before delivery or after delivery and then payment is done after the due date usually. They also prepare purchase book; debit note and credit note and when there is outward supply (sale) involved they do an e-way bill and tax invoice if the amount is more than Rs.50,000. This bill includes address details, goods details, transportation details. The payments are settled through NEFT (National electronic funds transfer) and they sell goods on credit too. The annual requirements require them to prepare balance sheet and profit and loss. Payments to suppliers, employees and other statutory payments are settled by them as well.

- Quality department

The quality department maintains a list which includes day wise and department wise data along with the overall rejections in each department and top 3 company rejections in terms of highest quantity rejections and which department has it.

The quality department has placed a person in every operational department who checks the quality pf production and reports to them the number of rejections per day. They then think of possible reasons behind them and the corrective measures that can be taken like increasing quality checks during production line, increasing skilled manpower, removing inefficient workers. The rejection list contains data like the types of rejections e.g., Scratches, QR code missing, moulding defect etc. This also needs to be submitted to their client companies. Less than 2% is the acceptable limit for rejection under quality check. If rejected pieces are passed onto the client then Elin does CAPA report (corrective and preventive action) for these goods.

- Planning department

They work in coordination with other departments specially moulding, printing and painting. The planning schedule is done keeping in mind when it will be dispatched. It takes around 3 days to be ready, so for this 3 days prior plan is made(moulding takes 1 day, painting 1 day and printing another 1 day). This plan is placed in the general manager's office on the white board where most meetings/ discussions take place and people can refer to per day how much is to be made and what all is to be made and be informed about any changes that take place. A month wise tentative plan is made as well and displayed as and when required or asked. In production both daily and monthly plan is used. Daily plan can change as the quantity demanded can increase or decrease. They then make revisions accordingly. They decide how much raw materials to order based on the production plan and quantity available in the store department. Buffer of 200-300 stock is kept. This is usually done when the supplying party is based outside of Goa and the transportation can take too long to deliver. Some customers like IFB give a daily production plan while other customers like Molbio, Crompton have a fixed monthly production plan which is divided into day wise segregation. Planning is done for raw materials and also for materials produced by one department which will be used as a material in another department. Material to be consumed is predetermined for each day (same quantity) based on the monthly and daily production plan. Through this method with the help of excel they can know on which day the stock quantity will fall less (negative figure) and accordingly the reorder quantity can be decided. Even after thorough planning or planning beforehand, at times shortages can take place cause of the following reasons: Number of rejections were more and to replace this a fresh batch was produced and this would require more raw materials that were previously not

counted for. If there is a sudden change in plan like an increase in quantity required then production will increase and shortage will arise.

- EDP department

Electronic data processing department looks after the work of computers. Every department has a factory area and an office are. All the materials that enter and leave the department are entered into the computers of the office. The EDP department handles sanctions and repairs of these electronic devices. The production plan that comes from IFB is sent to the EDP department and is then forwarded to the respective departments. They also do database management and handle the payroll work of employees in coordination with the HR department.

Breakdown book – It was first used only for breakdowns in machines in the moulding department but now it has also extended to other departments. It is maintained for electronic devices like computers, printers where details like who reported the problem, which computer and the time taken to solve the issue. The EDP is in charge of this, this promotes promptness in action and also acts like a record of their efficiency.

- Purchase department

Purchase department is in charge of buying all items needed by the organization. They interact with suppliers, receives quotations from them and places orders from them. They have to see whether materials that have come in balance with the requirements as this quantity gets updated regularly. The reorder date is decided by the purchase department and they don't have a set date but do it when the shortage arises. The purchasing department makes sure that the right commodities or items are bought and also makes sure that the right quantity of these goods is purchased. After purchasing items, the purchasing department supplies these items to other departments of the company and are in charge of distributing the items within the company.

Learnings derived and Contribution

This internship has taught me how to work in a professional setting and learn how to navigate the working world through real-life, hands-on experience It has also given me the ability to speak with people in a professional setting.

The other learnings derived through the experience of interning and handling responsibilities are:

The organisational structure of Elin electronics ltd. is a functional structure where the employees under each of the departments are well-trained and they are grouped in accordance with their area of specialization. The only drawback about this structure as it was observed, was that at times, the employees of one department weren't aware about the situations of other departments, and this caused obstacles in cooperation which is very much needed by one department from another department. They focussed more on the targets of their respective departments for example production has to meet certain targets in terms of quantity produced or dispatched and when the quality department found a lot of rejections this decreased their quantity that could be dispatched and caused internal conflicts.

According to me, in such situations it would be useful to use integrative negotiation/ integrative bargaining where a common solution that is beneficial to both parties can be agreed upon. In this case both the parties should focus on the main goal of the organisation, which is to increase production and profits and instead of looking at it from an independent departmental view, they should collaborate from the very beginning till the end process. For example, instead of checking the quality of the final component, the manpower under quality department can be increased and they can be placed after each of the manufacturing processes, so that rejections can be curtailed right from the start instead of letting them pile up and materials getting exhausted when they are checked after they are ready.

Since they operate in a B2B market, lower prices will mostly not bring new prospective buyers into the market, nor will they cause business customers to buy things they have no need to buy otherwise. So their main sales is from having

their prices based on a tactical relationship with their customers, where they focus more on earning through repeat business hence their price elasticity is based on a price-volume relationship.

In order to leverage price elasticity as an opportunity, they should study the relationship between price and demand in their buyer's past transactions with respect to the customer, product and order data. From this data, they can then segment customers into small groups that have similar price response and measure the price elasticity on an ongoing basis for each segment. Next, they can get an optimized price recommendation that will predict their likelihood to purchase once changes are made based on that demand-elasticity curve. This will increase their profitability, and their buyers will have a frictionless buying experience that encourages increased loyalty.

The entire factory does not use the same type of manufacturing process. Some Components pass through the three departments i.e., moulding, painting, printing in batches and therefore fall under batch process manufacturing since it depends on customer demand/ targets or the availability of ingredients and raw materials. One manufacturing run under each department produces a batch enough to fill the required targets and then is passed on to the next department. This whole process is resumed when a new batch needs to be produced. These batches are then sent to dispatch department for sales or to audio department for assembling.

The Audio department makes uses of assembly line production where material is transported between individual workers with operating tools with the help of interlinked conveyor systems (e.g., conveyor belts) individually in the sequence of operation and at every step a part is added to the semifinished product. They make sure that each component travels the least distance possible while processing and each worker is given equal task so that time taken by each is equally divided. For example, if a component needs 4 screws to be fitted, instead of a single worker doing all 4 they have divided it into 2 screw fitting stations so that production process is not halted in between.

One of the tasks assigned to me was to note the machine cycle time and production in terms of quantity per hour, this was noted down twice a day from 9 a.m. to 12p.m. and 1 p.m. to 5 p.m. According to me they should make use of this by first measuring the average hourly capacity of a particular machine and then

use this data in optimising manufacturing capacity to ensure that both machines and employees operating them work to capacity. This will help the company keep their costs down by increasing efficiency and identifying areas or machines that would need improvement.

While working with the planning department it was learnt that they make use BOM (Bill of material) which is a centralized source of information containing a list of items used to manufacture components. This ensures that parts that will be used are available when needed as well as makes sure that the assembly process is as efficient as possible. It helps to predict when an inventory shortage is likely to occur by studying how much inventory is currently present in the store and how much will be used in the coming days.

After understanding when materials will need to be purchased for production, this will help them to know when to order in advance and this will then aid in finding the best deal from suppliers as well as save money and improve their relationship with their suppliers.

When it comes to choosing suppliers, even though they select the quantity and quality of these raw materials on the basis of specified organization norms but they mostly choose the supplier on the basis of their past experience with the them and focus more towards repeat business, giving little thought to the need to change suppliers. The buying behaviour is still very much different than the buying behaviour of consumer goods as they are influenced more by profits and the procedures followed by them are different as well as it includes preparing bulk orders, studying the type, quality, quantity, asking quotations, evaluating tenders, terms of payment, delivery time, etc. while making a purchase decision.

They should also focus on maintaining a larger supply base so that they have more choices to compare and this will give them the best price in the market.

Under maintenance policies for facilities and equipments, they make use of both preventive and breakdown maintenance. They make use of breakdown maintenance or corrective maintenance more for facility management of equipment that are not critical to operations and short-life assets like printers, computers. The benefit out of this is that by reducing schedule and labour needs, breakdown maintenance will increase operational efficiency on both critical and non-critical machinery because service will be applied when necessary and not

before which will reduce costly part replacements. This will help them focus on optimizing Preventive maintenance for critical equipment like the machinery under moulding department.

Another maintenance method that could be used by them would be predictive maintenance which is part of Total productive maintenance. Since they follow the practice of noting the hourly production in units of every machine, this data can help them predict problems. For example, if it is observed that a machine tends to deteriorate after reaching a certain limit in terms of production of moulded components then maintenance can be done before it breaks down. This will help them to minimize the time the equipment is being maintained, the production hours lost to maintenance and the cost of spare parts and supplies.

The competitive strategy used by them is Best-Cost Provider Strategy since they choose a focused market of plastic component users and appeal to them with a low cost. Their aim is to exceed the customer's expectations for both cost and quality. In order to further advance this strategy, they will have to become an expert at finding the lowest-cost suppliers within the values of the company. They must pay attention to detail and offer the same quality product as their competitors but at a lower cost through tactical pricing decisions which will empower them to offer comparable goods to their customer companies at a lower cost. In order for this to work well they will have to maintain good quality control and manufacturing relationships

One of my responsibility was to prepare a Reconciliation report which is the process of comparing physical inventory counts with records of inventory on hand for the months of May and July while working with the store and production department. This helped me learn the process and importance of inventory management. This report helps reduce stock discrepancies and understand why there are discrepancies in the first place. The physical count was obtained from the store department in the form of raw materials that were carried outwards and become the issued materials for production. From this the materials that have gone out through sales are deducted. Some of the discrepancies noticed were due to human error and unlisted items.

The factors that affect their demand are directly based on the demand of their customer companies .i.e. it’s a derived demand where demand for their processed goods is derived from consumer markets .Their customers include IFB , Phillips

who produce electronic goods whose demand is the highest between the months of July to November since it is the time of festivities and people purchase more of electronic appliances during these times , because of this their demand also increases when the demand of their customers increase. If they expand their customer base then even when the demand from one customer is low, they can make up for this through the demand of other customer.

Downsizing is done by them during times of low production, when their demand is low. Since most of their factory workers are on contract basis, this helps them hire or downsize whenever they need. Downsizing helps them to reduce the operational expenses of their business by reducing the size of the workforce and opting for assembly line closure to make their company more efficient and leaner when there is low demand.

They make use of only 2 marketing channels one is plastindia which is a series of exhibitions under the aegis of Plastindia Foundation covering the entire gamut of plastics producers, processors and users of plastics, and it witnesses intense participation by both Indian and International Plastics Fraternity. And the other is word of mouth since most of their customers have been associated with them for a long time, their revenue is dependent on the revenue of their customers and when the sales of their customers increase, this leads to increase in sales for them as well. Along with this they should also make use of referrals as this will help them control the sharing process of word of mouth. By setting up how and what their customers say about them, they can bring in new customers as well as have a higher customer retention. Referral marketing will be more useful to them as it is measurable, repeatable and it can be controlled, focused and targeted.