Internship Report on



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Acknowledgment

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Executive summary

An internship is a program that allows a student to get their first taste of corporate life. I got the opportunity as an intern to the WALTON group's MARCEL distribution network. I completed my report on the MARCEL distributor network's sales.

This report is based on my three-month internship at the MARCEL distribution network, which gave me the opportunity to learn about the real-world operations of a business consulting organization. MARCEL manufactures dynamic electrics and electronics. MARCEL is a subsidiary of the WALTON group, which was founded in 1977 by S.M Nurul Alam Rezvi under the R.B Group (Rezvi and Brothers). Currently, it is the leading group in Bangladesh's Electric and Electronic sector. MARCEL is the new parallel brand of the WALTON group. It was established in the year 2006. Soon after the establishment, MARCEL began to make a place in the market. In just a few years it beat many well-known companies in Bangladesh in the refrigerator sector and showed great potential in TV, AC, and Home Appliance products. MARCEL had its ups and downs but now it is in its growth phase. The turning point of MARCEL occurred in 2017 but after that, due to the pandemic it has to face some hardships but it did not take much time to regain its sales amount.

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Introduction

Introduction:

This report is on my three-month long internship at MARCEL sales department. Main focus of this report is to provide analysis of working in a business culture based on my experiences and learnings.

MARCEL is a new brand of the WALTON GROUP. It started its journey on 2006 and since then it has been growing rapidly and touching the peak to become one of the top brands of Bangladesh. The credit of achieving this much of success in a very short time goes to the incredible sales team. Their constant efforts, skills and creativity lead MARCEL to conquer the market.

This report highlights on MARCEL's sales performance, distributor analysis and many other factors. It also showcases the journey as an intern and on my learnings and my contributions. It also shows how my diverse academic courses helped me to compete and perform in a competitive business environment.

Company Overview on



2.1 Historical Background:

WALTON is new global electrical, electronics. autos. and other appliance brand with one of the world's largest and best-equipped R&I centers, which manufactures through several subsidiaries under the WALTON **GROUP** headquarters in Bangladesh. WALTON now employs over 30000 people across 22 production bases spread throughout 700 acres of factory land. Based on market demand, the annual production capacity is 10 million units.

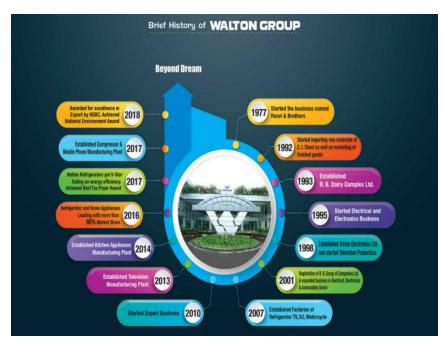


Figure 1.1: Brief History of WALTON GROUP

Walton is a large professional manufacturer in the relevant industry with a strong reputation for creating Electrical & Electronics goods in the most cost-effective, quality-conscious, design-conscious, and innovative manner possible.

WALTON started its journey in 1977 and WHIL began manufacturing refrigerators, freezers, air conditioners, and compressors in early 2008, and has since expanded its operations to include televisions, home appliances, and electrical appliances. Through its strong production base, quality goods, competitive pricing, extensive market penetration, and, last but not least, rapid after-sales services, Walton & Marcel has become Bangladesh's most trusted and prestigious brand in the E&E business. As a result, in a relatively short amount of time, both Brands have amassed significant market share and established themselves as Bangladesh's most dominant performance in the E&E sector. WHIL offers refrigerators (frost and non-frost), freezers, air conditioners, compressors, and televisions. WALTON GROUP has three brands- WALTON, MARCEL, ORIGIN, and many sister concerns.

2.2 MARCEL:

MARCEL is the new parallel brand of WALTON GROUP which is headquartered in Chandara, Kaliakair, Gazipur. Designing, producing, exporting, and retailing consumer electronics, household appliances, and



vehicles are the company's main businesses. The majority of MARCEL's

products, such as refrigerators, freezers, air conditioners, washing machines, and microwave ovens, are manufactured by WALTON Hi-Tech Industries (WHIL). WALTON Micro-Tech Corporation (MTC) produces a wide range of home appliances, including blenders, cookware, induction cookers, gas stoves, rice cookers, and pressure cookers. Electric kettles, mosquito bats, water purifiers, torches and lamps, vacuum flasks, room heaters, irons, and other items are imported and by DPI. The R.B. (Rezvi & Brothers) group has various subsidiary companies that distribute MARCEL products throughout Bangladesh and the rest of the world.

MARCEL products are known for their superior quality, convenience of use, and cutting-edge technology. MARCEL has a nationwide network of sales and service centers staffed by highly trained and efficient technicians. It holds International Standardization Certification for its quality management system (ISO 9001:2008) and its environmental management system (ISO 14001:2004).

2.3 Mission & Vision:

Mission: At MARCEL, we would like to create a future that will be exciting and promising for everyone and become a premier brand of Bangladesh.

Vision: MARCEL pursues a 21st-century vision of becoming a true and universal brand and delivering products with pride in this industry through excellence.

2.4 Sister Concerns of Walton:

➤ Dream Park international. Ø RB Group of Companies Ltd.

➤ Walton Agro Farm & Industries Ltd. Ø Walton Corporation Ltd.

➤ Walton Digi-Tech Industries Ltd. Ø Walton Group.

➤ Walton High-Tech Industries Ltd. Ø Walton Micro-Tech Corporation Ltd.

➤ Walton Plaza (Trade). Ø Walton Plaza (Import).

➤ Walton Shipping & Logistics.

2.5 Organogram of MARCEL Sales Department:

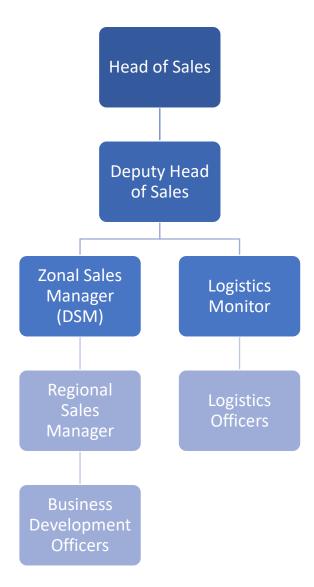


Figure 1.3: Organogram of MARCEL Sales Department

2.6 Overview of MARCEL:



Туре	Private Limited Company
Industry	Conglomerate
Founding Year	2006
Corporate office	Bashundhara R/A, P.O: Khilkhet, P.S: Vatara, Dhaka 1229
Key person	S.M Nurul Alam Rezvi. S.M. Samsul Alam and Brothers
Factory	Chandra, Gazipur
Products	Consumer electronics, home appliance, automobile.
Areas Served	Bangladesh, South Asia, North America, Australia, Middle East and Africa.
Number of	10000+ (direct and indirect)
Employees	
Logo	MARCEL
Contacts	Phone: +880295716346,
	Head office: 7170271-2
	Fax: 88-02-9572057,9551577
	E-mail: info@MARCELbd.com
Website	https://marcelbd.com/

2.7 Product Offerings:

MARCEL now sells a wide range of products in Bangladesh. MARCEL's products are mostly divided into six categories, which are listed below-

- Fridge
- TV
- AC
- HAP (Home appliances)
- KAP (Kitchen appliances)
- EAP (Electronic appliances)

Fridge:

MARCEL offers fridges in different categories like- frost, non-frost, beverage cooler, and in different price ranges. This is the most selling product of MARCEL. More than 60% of their profits come from this sector.







Figure 1.4: Types of Fridges

TV:

This is the second most sold products of MARCEL. They have a wide range of products with different price variations and features. About 12% of profits are from this category.







Figure 1.5: Types of TVs

AC:

It is the third most sold products of MARCEL. It also has a wide price range and features. 10% of the profits comes from this sector.







Figure 1.6: Types of ACs

HAP:

It includes all the products of that we use in our regular households. It has a wide range of products and prices are comparatively lower than other brands. Most of the products are made in their factories or assembled. The assembled products are from Dream Park International.



Figure 1.7: Types of HAP

KAP:

This category includes products of different kitchen appliances and tools. It was previously included in the home appliance sector but now they have made it another product category.

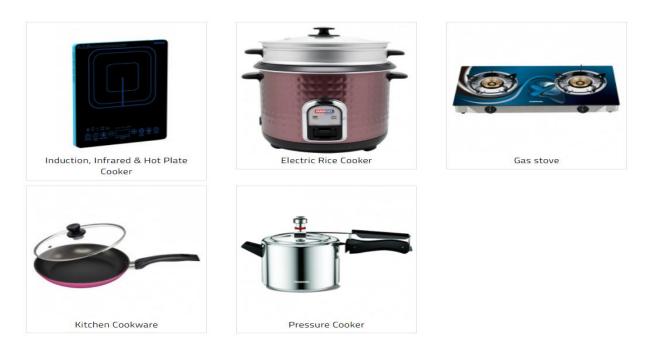


Figure 1.8: Types of KAP

EAP:

It has the lowest share in the profits but has a great potential. It offers all sort of electric products that are used by the consumers in their regular life.



Figure 1.9: Types of EAP

2.8 Customer base:

MARCEL has a loyal customer base across the country. Currently it has more than 1000 distributor points all over Bangladesh. Their target customers are mainly the middle-class people. they provide many extra-ordinary facilities and offers to their customers which helps them to stand out in the market. It already got brand recognition from people for their products and services.

2.9 SWOT analysis:

Strength:

- Largest electronic base in Bangladesh.
- > Strong Distribution channels and customer service.
- > Decent Human Resource and Infrastructure acrossthe country.
- > Customer base that is loyal.
- > Exceptional ethical standards.
- ➤ Management staff with a lot of experience.
- > Brand name and reputation are well-known.

Weakness:

- Less product availability.
- ➤ It has a difficulty with management.
- ➤ In the company, there is not much inside-out thinking
- > Different departments are not cooperating.
- > Employee turnover is high.
- ➤ There is a propensity to be overlooked at times.

Opportunities:

- Provide online purchasing options.
- ➤ Boost the brand's worth with the initial offering.
- > The distributor now has a better interconnection.
- > Lower price range.
- ➤ There is a huge need for electronic services.
- > Bangladesh's economic development.

Threats:

- > The company's aggressive marketing.
- Price war.
- > Customers' switching power
- > Expenses for marketing and operations have increased.
- > Government regulation that is more stringent.

Industry Analysis of E&E Sector

3.1. Overview of the Industry:

The electric and electronics (E&E) field have a great impact on building a modern society. Modern society demands ease and efficiency in their life and to achieve those electronics have always been the greatest help. Now we live in a generation where machines and tools have been a must part of our daily life and with the help of artificial intelligence, it is trying to achieve human-level efficiency.

3.2. Industry Growth and Market Size:

The consumer electronics market is continuously developing due to the constant development of smart devices. Currently electronics market worth is US\$9249 million in 2021 with a 7.92% annual growth rate. After the pandemic, about 19.6% of the total revenue are coming from online sales. The consumer electronics sector is highly affected by the pandemic. Among these consumer goods refrigerators, air conditioners and home appliances have shares respectively 57%, 17%, and 26%.

3.3. Performance of Bangladesh in E&E Industry:

The electronics field started its journey in the early 1900s and entered in Bangladesh at 1930s. In Bangladesh electronics was introduced in the communication sector with radio stations and wireless communication systems. Then in 1964, the first TV station was built and in 1983 first digital telephone system and then the mobile phone was introduced in 1992. But now the electric and electronics industry in here is mostly customer goods based. These customer items include Refrigerators, TV, air conditioner, mobile phone, personal computers, and other home

and kitchen appliances. All of these products are mostly imported and then assembled here in the country. For this reason, many manufacturing factories were built since the 1960s.

The consumer electronics market is continuously developing due to the constant development of smart devices. Currently electronics market worth is US\$9249 million in 2021 with a 7.92% annual growth rate. After the pandemic, about 19.6% of the total revenue are coming from online sales. The consumer electronics sector is highly affected by the pandemic. Among these consumer goods refrigerators, air conditioners and home appliances have shares respectively 57%, 17%, and 26%.

At first, Bangladesh was totally dependent on imported electronics products. But now the scenario has changed. Local companies have recognized the potentiality of this field which is why more companies are coming forward to manufacture our own electric and electronics products. But now at the end of 2020, total market share of E&E sector worth US\$3.2 billion and also had an annual growth rate of 11%.

3.4. Major players in the market:

Bangladesh has very few companies to manufacture its own electronics products. But now some brands like- WALTON, MARCEL, MyOne, JAMUNA, Rangs Electronics, PRAN-RFL (Vision) are manufacturing our own electronics products.

Other than these consumer electronics goods are imported from many other brands like- Sony, Toshiba, Panasonic, Samsung, LG, Microsoft, Apple, etc.

Market share by brands in Bangladesh is shown below-

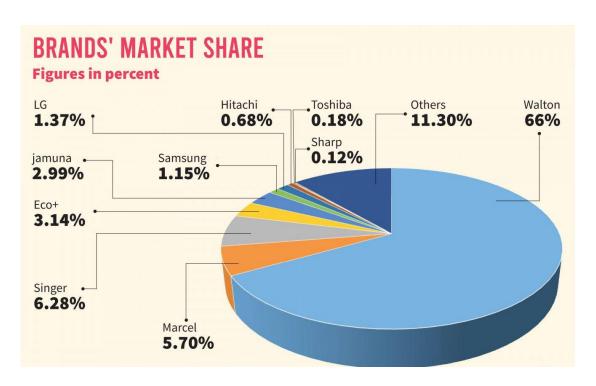


Figure 2.1: Brands' Market Share

3.5. Seasonality and Market Trend:

Consumer electronic products are mostly sold in the summer season. In Bangladesh, we can see a great hike in demand for refrigerators during Eid too. Other than that AC and TV are also mostly sold in the summer season. These three products have the most share of the whole electronics market. In the winter season markets are quite down due to low demand for the products. But some home appliances are seen to rise in winters.

Currently, people are more attracted to automated devices like voice control AC, smart TV, and many other smart appliances like this due to digitalization. This is why now the trend is moving towards smart products.

3.6. Influencing Factors on E&E Sector:

Every product is affected by external and internal factors. External factors like economy, technology, the political environment have a great impact on E&E products.

3.6.1. Technological Influence:

Technology has a great influence on E&E products. Now people are shifting towards smart devices. The constant growth of robotics and artificial intelligence is creating a new era of digitalization. Which is causing constant development in E&E sectors.

3.6.2. Impacts of Pandemic:

We have already seen the effects of pandemics on every sector. Pandemic has already impacted the world economy. During the pandemic especially in 2020 sales were almost null in most of the companies. Both local and foreign companies suffered a lot. Some companies like- Vision had reached the verge of end during this pandemic.

3.7. Market potential:

Refrigerators, televisions, Air conditioners, and home appliances have great potential in the market. These are shown below-

Refrigerator:

it has the most share in the E&E sector which is about 57%. Frost, non-frost, beverage cooler, chest freezer are the types of

Figure 2.2: Market Share - Refrigerators

refrigerators sold in our country. In this case, local company WALTON and MARCEL has captured the whole market by segmenting the target market.

Air conditioners:

AC is another part of a big part of the E&E sector with a 17% share. The government has also put an effort in increasing the production of AC which helped it to be more affordable to general people. In the case of AC GENERAL has owned the market with 37% market share with its brand value.

Market Share by Brand - Air Conditioners

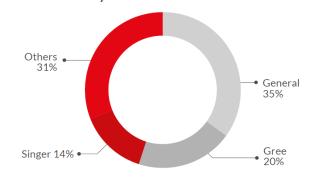


Figure 2.3: Market Share - AC

3.8. Competitive Analysis:

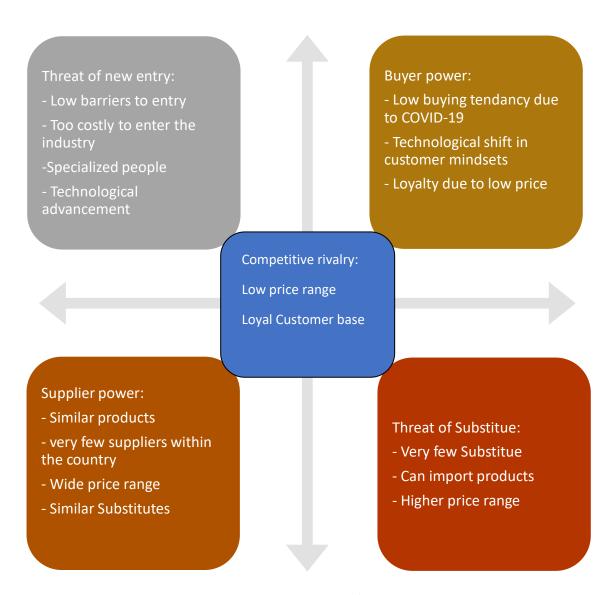


Figure 2.4: Competitive Analysis

Description of Main Duties

4.1. Typical working day:

Working days: Saturday – Thursday

Time: 9:00 AM – 6:00 PM

Main office: Bashundhara R/A, P.O: Khilkhet, P.S: Vatara, Dhaka 1229

Factory: Chandra, Gazipur

Lunch: 12:00-2:00 PM

In my department most of the people (Regional Sales Managers) works from there assigned zones for 2 weeks in a month and rest of the weeks they join the corporate office. When the department is full, a typical day starts with a morning meeting where all of the team members get feedback and new targets to work on. After that every member do their assigned tasks.

4.2. Major Responsibilities:

As an intern I was assigned to many tasks related to logistics and sales. These are shown below-

4.2.1. Logistics:

Logistics team was responsible for all the logistics plans from confirming orders to deliver the product to the distributors. Other than that, giving requisition and recommendations, providing gate pass, coordinating the branding tasks and many other jobs were done by the logistics team.

Among these my tasks were –

• Updating distributor files:

I was given the responsibilities of updating the distributors files. Here I had to check if

the documents are up to date or not like-TIN, BIN papers and etc.

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• Analyzing reports:

Here I had to read reports created by the regional managers and then identify the major issues and report them to the logistics head.

• Preparing official letters for the distributors:

Here I had to notify the distributors about their collection and pending money which needed to be paid in a fixed time period.

• Others:

I have also helped in generating reports on sales performance, providing insights based on the reports, coordinated with some branding tasks, etc.

4.2.2. Sales:

Sales team was responsible for meeting the daily, monthly, and yearly sales target and other sales processes. Among these my responsibilities were-

• Analyzing the distributors:

Here I have to visit the distributors and their showrooms throughout the country and then report their marketing strategy, progress and other information to the head of sales.

• Creating files:

Here I had to create the files based on sales quantity, total collection and other things.

• Others:

I had work on sales forecasting, editing reports and etc.

4.2.3. Factory visit:

Here I had to learn about the production process. Besides I also learned about the storage capacity, packaging process and delivery points.

4.3. Working tools:

During my internship period I have worked on several tools and software. These are describing below-

ORACLE:

It was used for all the logistics work. It is basically a software that provides all the business applications for managing and automating business processes.

Excel:

It is vastly used for all sort of sales reports. I used this for creating, editing and analyzing the reports.

4.4. Work interaction:

During my internship period I had to interact with the Logistics Officers and Logistics monitor, Regional Sales Managers, Deputy Head of Sales and Head of Sales in my daily work routine. Beside I had to interact with the distributors, showroom managers and other employees. Also, I had regular interactions with the Finance and Accounting department and Human Resource Department for reporting purposes. Most of the interactions were face-to-face or via phone calls.

Analysis

5.1. Company Level Analysis:

MARCEL has some business processes that make them unique from other brands. These processes are sometimes similar to other brands of WALTON GROUP, but still MARCEL do not forget to uphold its uniqueness with some features. Among their business processes most efficient that helps them to stand out and least efficient process that needs some betterment is shown below-

5.1.1. Most Efficient Process:

Sales Process:

MARCEL have unique strategies for their marketing and other operations. They have divided all the distributors into 30 different zones. Every zone is handled by the Regional Sales Managers (RSM). Zones are shown below-

- Dhaka West
- Dhaka East
- Dhaka North
- Dhaka South
- B. Baria
- Barisal
- Bogra
- Chandpur
- Chittagong
- Comilla
- Cox-Bazar
- Faridpur
- Feni
- Gazipur

- Jessore
- Kaliakair
- Khulna
- Kishoreganj
- Kushtia
- Laxmipur
- Madaripur
- Mymensingh
- Narsingdi
- Noakhali
- Pabna
- · Raj Shahi
- Rangpur
- Sylhet

- Tangail
- Uttara

MARCEL operates sales operations more efficiently by creating 30 zones. At first, Area managers collect orders from distributors of their specified zones and apply rebate structures and other policies on the orders. Then orders go to Divisional Sales Managers for recommendation and then the Deputy Head of sales and the Head of Sales must then approve off on the order sheet. After approval then the Logistics Officers create orders by applying rebate structure and other policies and then the Logistics Manager books orders on Oracle software. Finally, the orders are sent to the factory to deliver products to the distributors.

Discount policy:

- ➤ If a customer makes full payment within two months, then he will get the product at a cash price.
- ➤ If a customer makes full payment at a month, then he will have to pay cash price and get a lump sum discount.
- ➤ Discount is Depend on the distance of the customer's distribution house from the factory.
- ➤ When MARCEL Provides transportation facilities to the customers then they get a discount and vice versa.
- If a customer makes payment within the fourth month, then he will get no discount.

5.1.2. Least Efficient Process:

Collection Process:

At first, distributors provide their collection amount to the Regional Sales Managers. Then the collected money is posted by the Logistic Officer according to the investment of product ratio, such as 65% for refrigerators, 12% for LED TVs, 10% for air conditioners, and the rest for HAP, FAN, and other items. After that this information will be passed on to the accounts department. They will issue a clearance on the collection amount. After getting the clearance, it will be updated in the software to add to the ledger.

5.2. Market Level Analysis:

MARCEL has evolved a lot within a very short time. From its beginning it had an exceptional journey to become the second top most brand in Bangladesh. This section of the report mostly emphasis on the performance of MARCEL.

5.2.1. Sales Performance (2017 to 2021):

MARCEL has seen remarkable growth from 2019. But unfortunately, in 2020 as the world economy saw a tremendous loss MARCEL also faced the same situation. Because of the pandemic condition, sales dipped substantially in 2020 but increased dramatically in 2021. This kind of drastic shift in statistics is really uncommon. Now, if we dig deeper into the phenomenon, we can see that a drop in sales owing to the pandemic is abnormal, but the high sales in 2021 are also unusual. As can be seen, people's purchasing habits shifted throughout the latter months of 2020 because of the changing environment of consumer behavior. But the overall performance of MARCEL in the last five years was tremendous.

Refrigerator:

It is the most sold product of MARCEL. In Bangladesh MARCEL now stands 2nd leading brand. Growth in this sector has been huge since 2019. In 2019 total quantity of sales was 362869 which dropped a lot in 2020 due to the pandemic but then again in 2021 it regained its position. Following graph shows the growth in refrigerator sector.

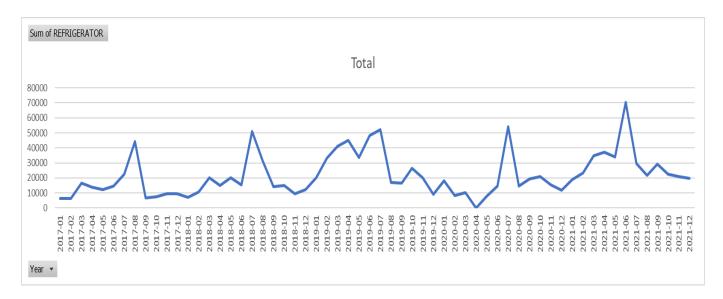


Figure 4.1: Refrigerator Sales by Year

TV:

It has a lot of potential in the market. MARCEL started to grab a hold in this sector by introducing smart TVs and many more new features. The following graph shows the growth of TV-

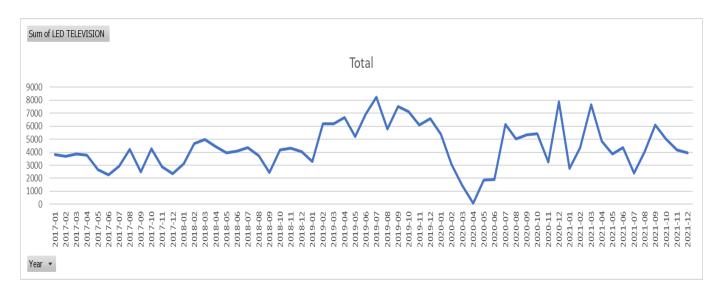


Figure 4.2: TV Sales by Year

AC:

It is the third most sold product of MARCEL with great potentiality. It has had a dramatic growth since 2019 like all other products. But the scope of this area is also huge. Following graph states the growth of AC-

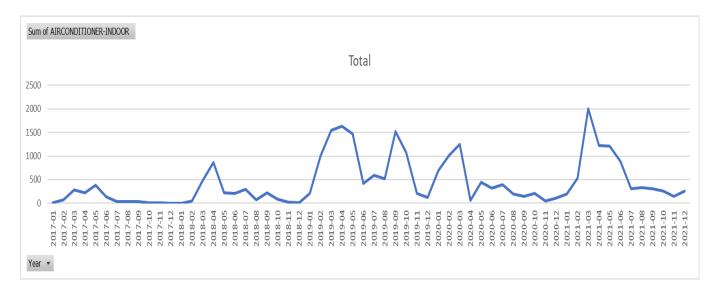


Figure 4.3: Air Conditioner Sales by Year

5.2.2. Effects of Pandemic:

I have tried to analyze and reasoning the underlying patterns of the sales data. In their data I found seasonality till 2019 which breaks in April,2020 because of the pandemic and a slightly

upward trend towards the end of the time series data. Here like many every business MARCEL also had to go through a tough period. Even there was a time when the sales were totally null. But thankfully they have overcome their hardship in 2021 and had a great shift in their sales value.

I have seen that there is a shift in consumer buying behavior during and after the Covid-19 pandemic. However, this does not guarantee that the year 2022 will be the same. Because if the situation returns to normal, there is a potential that people's purchasing habits will be the same as before the pandemic.

5.3. Professional Level Analysis:

During my internship tenure I have learned a lot from the organization and also got many opportunities to apply my learnings at work. Things that I have learned and improved during my learning are mentioned below-

Communication: I have had difficulties in communication since beginning of my student life. But in my work place I had to interact with many people for many reasons. All of these experiences have helped me to bring myself out from the barrier of nervousness.

Team Work: It is a very important skill to have as a person. MARCEL has helped me to flourish as a team member and contribute my learnings in their team.

Flexibility: My internship experience has helped me to approach many challenges and difficulties in a positive mindset. It also helped me to work on my proactiveness, patience, adaptability and other skills.

I also got many opportunities to contribute my learnings in their team. I have used my understanding of sales and marketing to analyze their organization, work processes and other strategies. I also used my skills of data science and coding languages in sales forecasting. It helped me to understand the statistical models better and apply them in real life projects.

Sales Forecasting

During my internship period at MARCEL, I analyzed their sales data and did a forecasting using my data science skills. For this purpose, I collected sales data of refrigerators, TV and AC from the previous files. In this forecasting I focused on refrigerators more as they bring the 65% of their profit. Here I used Python languages for forecasting and sales analysis.

Explanatory data analysis:

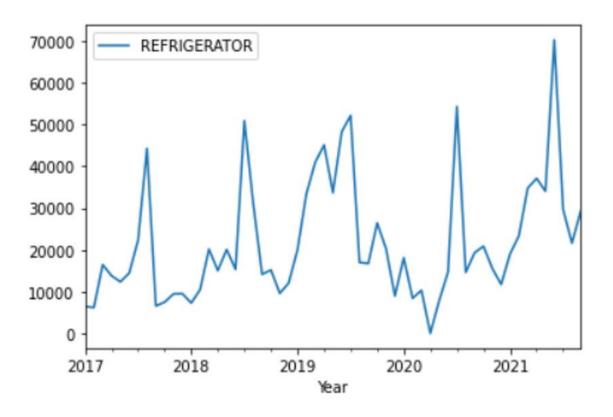


Figure 5.1 Sales quantity

In this graph we can see the sales quantity of refrigerators from 2017-2021. Here because of the pandemic condition, I discovered various anomalies in the data during this process. Sales dipped substantially in 2020, but increased dramatically in 2021. This kind of drastic shift in statistics is really uncommon. Now, if we dig deeper into the phenomenon, we can see that a drop in sales owing to the pandemic is abnormal, but the high sales in 2021 are also unusual. As can be seen, people's purchasing habits shifted throughout the latter months of 2020 because of the changing environment of consumer behavior. During this time people started to recover from their trauma

and began to purchase products more than usual. In this type of situation, it is very hard to predict consumer behavior.

Model building:

Building and effective model for forecasting is very important. In order to build the model, I have used many statistical algorithms. I have tried LSTM, ARIMA, SARIMA, and many other models among which SARIMA fits the dataset more accurately. The Seasonal Autoregressive Integrated Moving Average, or SARIMA model is a technique for modeling univariate time series data with trend and seasonal components. For this purpose, I tried to find correlations between data-

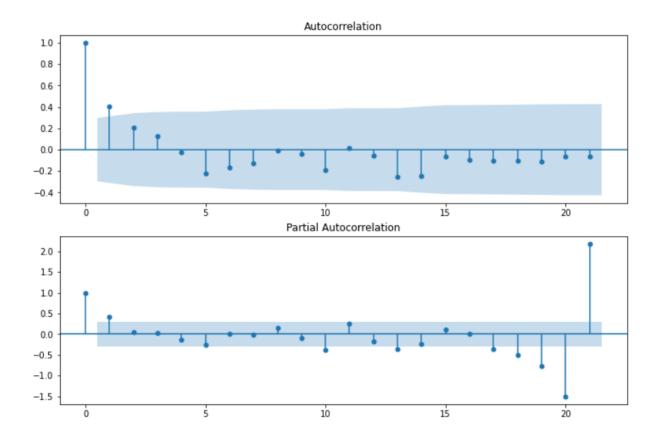


Figure 5.2 Autocorrelation and partial correlation

After that I checked if the data has any unit root or if it was stationary. Here I found that it had no unit root and also it was not stationary. Which means that the data has no strong trend or

seasonality in it. Though it should have had seasonality and trend but because of the pandemic it did not have any.

Then I applied the SARIMA model and forecasted for next 12 months. The forecasting is shown below-

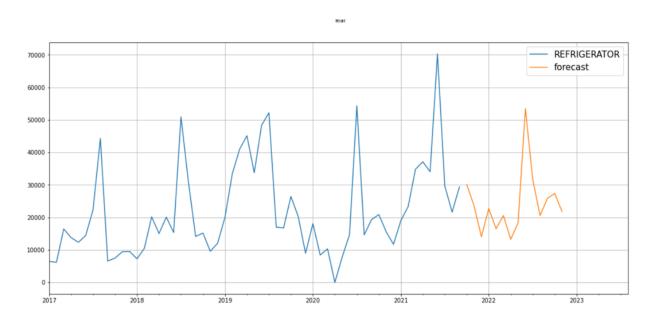


Figure 5.3 Forecasted sales

Evaluating the model:

To get a better visual of the difference between the forecasting and actual data I have plotted graphs that shows the forecasting of already existing data. Here we can see that the model captured the pattern of the data quite accurately.

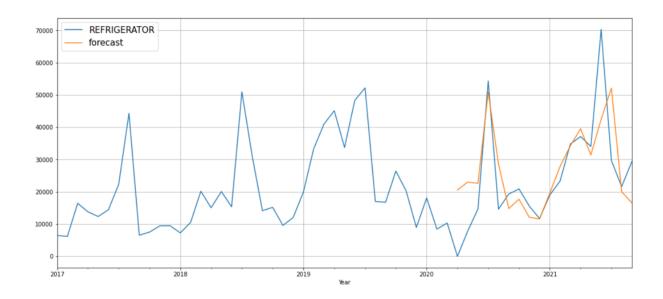


Figure 5.4 Evaluating forecast

Target vs Forecasting:

Here, my goal was to figure out how much of a gap was there between target and likely sales. It's a crucial metric for a company because if the gap is too wide, the targeted amount may not be met, and the company may face loss. This data will assist the company in taking safeguards in order to meet its goal. If the likely sales are higher, however, it indicates that the company is underestimating its target amount.

In the following figure we can see the comparison among actual, forecast and target values-

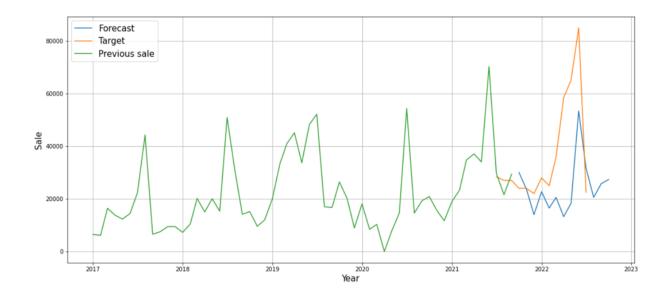


Figure 5.5 Target vs forecast

Here we can see the gap among the different sets of data. As here the forecasting is quite low than there target there can be a chance that demand can get low in the future. For that purpose, they should need take proper measures to prevent such circumstances.

Distributor Evaluation

One of the major duties of sales team was to analyze their distributors and pursue them to sell more. for this reason, I was sent to many distributor points all over the country to find some insights by visiting their most successful and some potential average distributors.

I went to visit 5 different distributor points from 5 different zones. These are-

- Family Electronics, Uttara
- Joy Enterprise, Dhaka South
- Shopnil Electronics, Gazipur
- Taz Electronics, Kushtia
- M/S Shanto Electronics, Pabna

These showrooms are ranked between average to top class. They have difference in their marketing strategies, business processes, maintenance and many more.

Market strategy analysis:

Taz Electronics' is one of MARCEL's most reputable distributors. Their showroom was voted the best in the country. It required far more attention than the other well-known companies in the area because it was a newcomer to the area. As a result, they invested heavily in marketing from the start. They've done this by installing microphones in the regions, arranging camping, hiring specialists to promote their showroom, and a variety of other tactics. They even took their clients' post-purchase experiences seriously, allocating funding to deliver customer assistance to them without having to wait for the firm to respond. They were able to develop as a result of all of these efforts. They used to be able to sell 400-500 refrigerators every year, but today they can sell 1000-1500 refrigerators per year. They even managed to sell 50 pieces of refrigerators in the month of December where maximum distributors face zero sales.

'M/S Shanto Electronics' has been working with MARCEL for almost five years. They began with a collection of 2 lacs and have since increased to around 20 lacs every month. In terms of their showroom, they attempted to advertise the brand in every home in their neighborhood. They enlisted the help of local hawkers to promote their goods. They were able to stand out in the market because of their past reputation in the local market. Their market position is the strongest in the area because competing with them is difficult.

Findings

Change in Demand:

Due to pandemic a significant change can be seen in the electronics demand. There has been a huge shift in consumer income, taste which triggered this shift. World economy has been affected by this situation which is why every industry is going through change. MARCEL also faced dramatic shifts in demands since 2020. Sometimes demands are closed to nothing on the other moment it reaches the peak.

Product Design:

MARCEL's target customers are mainly lower-middle-class people, which is why product pricing and designing are done according to their taste. But now MARCEL is increasing its target customer range and making products for all types of people. But the problem arises as these products' availability is lower. For example, they have a huge number of floral designs on refrigerators but have very few solid color refrigerators due to lower production. But market demand for solid color products is higher than the floral designs.

Product Display:

Distributors are facing problems due to backdated designs but when it comes to the alignment of their products, they are keeping the backdated designs in the front and the new designs in the back. Now if a customer with a solid color taste comes inside and sees the floral backdated designs first then there is a chance that they will leave the showroom without visiting the rest of the parts of the showroom.

Recommendations

Recommendations:

- As MARCEL is trying to go for the paper-free organization they can start their attempt by digitalizing the ordering process. For this purpose, they can use very familiar tools like google form. They can ask their distributors to fill the forms for ordering. This tool will then easily be incorporated with excel files.
- ➤ They can take proper measures to build effective communication among the departments. As an organization several departments needs to work together with harmony. Sales team needs to establish more effective communication process to provide a healthy and efficient work environment.
- ➤ Can arrange different programs to boost employees' self-esteem and technical skills. It is very important to become a tech savvy in today's generation. For that reason, not only making skilled employees are important but it is also very important to build a technological mindset among the employees.
- ➤ Product design is quite backdated for which customers may lose their interest in MARCEL's product. MARCEL has a great potential to grab the market of higher-middle class or higher-class people. But in order to do that they need to change their product design and also increase the production of these products if possible.
- > They should change their production according to demand of specific products.

Conclusion

Conclusion:

The E&E sector in Bangladesh is advancing at a rapid pace, as the country's economy grows and people's living standards improve. According to a recent survey performed by BUILD, over BDT 9.0 billion has been spent in the electronic home appliance assembling and manufacturing sector, employing over 10,000 individuals. The E&E industry's main goods are televisions, refrigerators, and air conditioners. The BUILD study concentrated on a few sub-sectors, attempting to comprehend the present market scenario, consumer preferences, the influence of market segmentation, evaluate rivals, and explain strategy and risks for each of the sub-sectors.

MARCEL is a key player in a brand-new competitive market. MARCEL adjusts itself on a regular basis in order to remain competitive and a leader in the high-tech area. When a statement is properly set up, realistic conditions constantly differ from cortical conditions. During my tenure at MARCEL, almost all of the workstations were determined at some point. Their marketing strategies helps them to stand out in the market. During the post pandemic situation, they successfully managed to overcome their loss and had a tremendous growth. It can be said that MARCEL is on his way to be one of the top brands in Bangladesh.

References:

- https://marcelbd.com/
- https://waltonbd.com/about
- https://www.nst.com.my/business/2021/10/737408/analyst-bulish-ee-sector
- https://www.miti.gov.my/miti/resources/6. Electrical and Electronics Industry .pdf
- https://seajbel.com/wp-content/uploads/2016/01/Econ-21.pdf
- https://thefinancialexpress.com.bd/views/domestic-electrical-and-electronics-products-gaining-consumer-confidence-1526224882
- https://en.wikipedia.org/wiki/Electronics_industry_in_Bangladesh

- https://www.hcidhaka.gov.in/pdf/Report on Consumer Electronics Industry in Bangla desh(1).pdf
- https://archive.dhakatribune.com/business/2021/06/21/op-ed-where-do-we-want-to-seeour-electronics-industry-in-10-years
- https://www.google.com/search?q=market+share+by+brand+tv+in+bd&tbm=isch&ved= 2ahUKEwiR74Stw4f3AhVigGMGHcqtA5gQ2cCegQIABAA&bih=714&biw=1536#imgrc=DhWDYU5PbWCvWM
- https://www.industriall-union.org/ict-ee-unions-focus-on-challenges-of-industry-40
- https://www.fortunebusinessinsights.com/consumer-electronics-market-104693#:~:text=The%20global%20consumer%20electronics%20market,of%20%2D5.4 %25%20in%202020.
- https://www.slideshare.net/SyedFaimulHasan/organogram-of-a-company-walton-bangladesh-ltd-92013065.
- https://www.semanticscholar.org/paper/ANALYZING-ORGANIZATIONAL-STRUCTURE-FOR-CONTRACTING-Zaki-Hussien/ea631393ca64b835f9f7d8d94b995d04f20cd473.
- https://www.oracle.com/applications/ebusiness/
- https://www.google.com/search?q=logistics+duty&oq=logistics+duty&aqs=chrome..69i5 7j0i22i30l3j0i10i22i30j0i22i30l5.5809j0j7&sourceid=chrome&ie=UTF-8

Week: 1st week

Date: From 7th Oct 2021 to 14th Qt

2021

List of activities with brief description:

I have started my internship at MARCEL Sales Department of WALTON GROUP. For the first week, my work was mainly to understand the organizational rules, regulations, values and working procen.

MARCEL is a new parallal brand of WALTON GROUP. Designing. manufacturing, exporting and retailing consumer electronics. household appliances are the company's main business.

MARCEL and WALTON work under the same roof, although they each have their own departments to focus on. MARCEL has its own sales team as other departments work for the whole organization except sales department.

Here I am giving brief description of the Sales Department of MARCEL and their working processes -

sales: This department is mostly concerned with the sales activity and meeting the sales target. It has—

Icisnim Medla ID: 120061016

- Head of Department: He leads and monitors the whole sales team.
- Deputy Hood of Department: He also monitors and leads the whole sales team and also provides the continuity in the absence of HoD.
- Direct Sales Town & 5 Divisional Sales Managers (DSM) and Bo Regional Sales Manager (RSM) are responsible for conducting direct sales & collection activities of their assigned area/some.
- Logistics Section: 1 Logistics Manager and 7 logistics Officers are responsible for providing official support of their assigned area/task.
- Market Development & Credit Monitoring Section: I team leader, I deputy head and II credit monitoring officers are concerned with creating new distributors throughout the country to expand their business & also responsible for taking edlection from the distributors who fail to provide erough emount of collection.

Sales Procen: MARCEL operates sales operations more efficiently by creating 30 zones. At first, Regional sales Managers collect orders from distributors of their specified

Tagnim Medha ID; 170061016 Rones & apply rebate structure & other policies on the orders. Then they submit orders to Divisional bales Managers for recommendation & then the Deputy Head of Sales & the Head of Sales must then approve off on the order sheet. After approval then the Logistics Officers create orders by applying rebate structure & other policies & then the Logistics Manager books orders on Oracle software. Finally, the orders are sent to the factory to deliner products to the distributors.

Delivery:

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Company Supervisor

T.Md. Shakhawat Hosser

Segior Executive Director

MARCEL

Academic Supervisor

Tarnim Medha
ID: 170061016

Week: 2nd week

Date: 16 Oct 2021 to 21 Oct 2021

List of activities with brief description:

For the second week, I learn't more about the process of product delivery, collection of money and showsoom Oracle implementation.

MARCEL uses Oracle software to maintain their business oriented tasks. Oracle offers a comprehensive and fully integrated stack of cloud applications and platform services. Very few companies in Bangbolesh use Oracle to maintain their database because of high cost.

Some of the tasks that I have barnt this week are Shown below -

It Creating sales order of product on Oracle by applying different types of rebate structure.

A Collection process on Oracle

12 Offer sheet preparing as per different policies and other requirements

12 Product/model change

1 Distributors' signboard/backdrop/bill board requisition

D Warranty card change related tasks and som.

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Aside from the activities listed above, the logistics team is in change of arms of other duties. I am hoping to learn more about the responsibilities of logistics team as well as other teams.

Collection Procens

At first distributor provide his collection amount to the Regional Gales Manager (RSM). RSM informs the logistic executives for next step. Then the collected money is posted by the logistic officer according to the investment of product ratio, ex-65% for refrigerators, 12% for LEDTL, 10% for air conditioners and the next for HAP. FAN and other items. After that this information will be passed on to the accounts department

for confirmation. The accorts department will issue a clearance on the collection amount. After getting the clearance, it will be updated in the software to add to the hedger and distributor will be informed about his payment by SMS.

Company Supermediation Discourse MARCEL

Academic Supervisor

Week: 3rd week

Date: 23 October 2021 to 28 October 2021

List of activities with brief description:

I have tried to apply my learnings about data science of machine learning to forecast sales this week. Sales forecasts can be used to identify benchmarks of determine incremental impacts of new initiatives, plan resources in response to expected demand of project future budgets.

Here, my goal was to figure out how much of a gap was there between target & achievement of sales. It's a crucial metric for a company because if the gap is too wide, the tergeted amount may not be met & the company may face loss. This data will exsist the company in taking safeguards in order to meet their goal. If the likely sales are higher, however, it indicates that the company is under-estimating their target amount.

I gathered sales data for Refrigerators, Air Corditioners. I LED Televisions from 2017 to 2021 for this purpose. After that, I transformed the raw data into a time series dataset. Following that, I did some exploratory data analysis (EDA) on the data. Describing these terms below—

Time series data :

Time series data is data that is collected at different points in time. It is required to extract meaningful statistics & characteristics about the data.

Exploratory data analysis:

In statistics, exploratory data analysis is an approach of analyzing data sets to summarise their main characteristics, often using statistical graphics & other data visualization methods.

Because of the pardomine condition, I disco found various gaps in the data during this procen. Sales dipped substantially in 2020, but increased dramatically in 2021. This kind of drestic shift in statistics is really uncommon. Now, if we dig deeper into the phenomeron, we can see that a drop in sales owing to the pandemic is abnormal, but the high sales in 2021 are also a improvement. As on be seen, people's purchasing habits shifted throughout the latter months of 2020 because of the changing environment of the consumer behalow

Company Supervisor

Academic Supervisor

Tasnim Medla ID: 170061016

Week: 4th week

Date: 30 October 2021 to 4 November 2021

List of activities with brief description:

This week I continued my data analysis on sales forecasting.

In the previous week I have tried to analyze of the pales data. I have seen that there was a shift in consumer buying behavior during a after the Covid-19 pandemic situation. If the situation returns to normal, there is a potential that people's purchasing habits will be the same as before the pandemic.

In their data I found seasonality till 2019 which breaks in April, 2020 because of the pendamic & a slightly upward trend towards the end of the time series data. This insignificant seasonality & trend can be ignormed. After testing the seasonality of trend among data I went for modeling, training & evaluating data.

Training the model:

The procen of modeling means training a machine Learning algorithm to predict the labels from the Learning algorithm to predict the labels from the features, tuning it for the business need & validating it on holdout data. The output from modeling is a trained model that can be used for inference, making predictions on new data points. I have tried LETM, ARIMA, BARIMA on new data points. I have tried LETM, ARIMA, BARIMA fits the many other models among which BARIMA fits the dataset more accurately. The second BARIMA model is an approach for modeling univariate time series date that may contain trend & seasonal components.

Evaluating the trained models

To evaluate the prediction, I have followed a simple technique. Here, I have compared the predictions with actual data & plotted that in graph. This visualisation with actual data & plotted that in graph. This visualisation helps to see the similarities & differences between the helps to see the similarities & differences between the prediction & actual data. In our dataset we can see prediction & actually gives results based on the that this model actually gives results based on the data up to 2010 by ignoring the drestic charges of data up to 2010 by ignoring the drestic charges of

2020. It can achieve more accumely by adding more data & other variables like relate policies, offers. economic factors etc.

This machine tearning forecasting technique is very useful because it helps increase sales conversions because it has revolutionized the ways of selling. Machine learning tools will be able to scope out, act on and complete high-potential sales much better than human representatives at a faster, more scalable pace.

Company Supervisor 2014 12 4

Academic Supervisor

Marana

Tagnin Medha
ID: 170061016

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**	COL	 , ,,,

Date: 6 November 2021-11 November 2021

List of activities with brief description:

This week I was assigned to the following tasks -

1 Necessary item requisition

12 Forwarding Oracle reports by mail/courier

A Distributor's cheque entry & reservation

1 Preparing necessary reports (partial)

A Preparing list for order release

Decreating new party file purpose coordination & procen

1 Updating distributors files

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Company Supervisor

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Academic Supervisor

Week: 6

Date: 13 Nov 2021 to 18 Nov 2021

List of activities with brief description;

This week I have learned the following tasks -

The creating new distributor file, purpose coordination and process

1 New distributor file documentation

1 Document scanning and mailing

Promotional items gate pan entry and recommendation

12 Digital campaign offer adjustment

1 Coordinator of branding task (partial)

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Company Shakhawat Hossell
Senior Executive Director
MARCEL

Novaka

Academic Supervisor

WEEKLY OVER	VIEW OF	INTERNSHIP	ACTIVITIES
the state of the s	And in contrast of the last of		

Week: X

Date: 20 Nov 2021 - 25 Nov 2021

List of activities with brief description:

This week I have learned the following tasks -

西Car requisition process

12 Necessary items requisition

1 Updating distributors files

1 Document drafting

12 Of day tour entry process

4 Offer sheet preparing as per different policies and other requirements.

Company Super-Mo Shakhawat Hossen Senior Executive Director MARCEL

Academic Supervisor

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Date: 27 Nov 2021 - 2 Dec 2021

List of activities with brief description:

For this week I went for showroom visit. These showrooms were from Uttara and Dhaka South some. In these showrooms, I have observed their product availability, employee details, financial performance and many other components. From this showroom visit I have learned what MARCEL afters their distributors and what are their limitations. These Ben are shown below -

Company Superidy iso Senior Executive Director MARCEL

Academic Supervisor

WEEKLY OVERVIEW OF INTERNSHIP ACTIVITIES
Week: 8 Date: 27 Nov 2021 - 2 Dec 2021
Benefits provided by MARCEL-
De Lower price Variations of products Reborte policies Biff items Foreign towns based on performance Foreign towns based on performance Foreign towns based on recting cartain criterion Describes for meeting cartain criterion Describes service center
Limitations -
A some designs are backdated
1 Customer service is sometimes deliged
Hobz 28 n/ wel -
Company Supervisor Dr. Md. Shakhawat Hossen Senior Executive Director MARCEL Some and the state of the state

Week: 9

Date: 4 Dec 2021 - 0) Dec 2021

List of activities with brief description:

For this week I went for factory visit. During the visit, I mainly learned about refrigerator and compressors. These are shown below -

Refrigerator: There are 4 lines of refrigerators. 3 of them are for frost while the other one is for non-frost, beverage coolers & so on. The majority of the components are self-made. However, other components, such as some compressors & the glaver for the refrigerator doors are imported from elswhere. Taiwan, China and many other countries provide the raw menterials. Refrigerators

Company Supervisord Senior Executive Director MARCEL

Academic Supervisor

Week: O

Date: 4 Dec 2021 - 9 Dec 2021

that are exported to other countries, such as India. are also manufactured here.

Compressor: The compressor is one of the 4 main components that makes the refrigerator work. But the production capacity of compressors is less than refrigerators. That is why they have to import extra compressors for their refrigerators for now but they are trying to increase their production so that they can provide compressors for all of their refrigerators.

Company Supervisor Dr. Md. Shakhawat Hossen Senior Executive Director MARCEL

Academic Supervisor

Week: 10

Date: 25 Dec 2021 - 30 Dec 2021

List of activities with brief description:

This week I went for a distributor visit at the Kushia zone. There I barned about their sales of marketing strategies observed their product availability, employee details, financial performance and many other components.

'Tax Electronics' is one of the best distributors of MARCEL Their showroom ranked numbers in the whole country. As a new brand in the area, it needed much more attention than the other well-recognized brands. 50, they put a lot of effort into marketing from the very beginning. For that, they have did miking in the day areas, arranged camping, hired professionals to promote their showrooms. They even took their customers post-buj

Company Supervisor 13 61 2022

\ Academic Supervisor

Tasnim Medha

Week: 10

List of activities with brief description:

experience servilly great importance which is why they allotted separate funds to provide customes service to them. All of thex strategies helped them to grow from five years go they sold 400-500 refrigerators in a ger but now they can sell 1000-1500 refrigarators in a year. They even sold 50 pieces of refrigorators in the month of Documber while other shourcoms are still struggling.

Academic Supervisor

Tagrim Medla

Week: 11

Date: 1 Jan 2022 - 6 Jan 2022

This week I visited another distributor at Pabna zone. This week I visited another distributor at Pabna zone. 'M/S Shanto Electronics' started its journey five years ago. At first, they started with a 2 Lakh, collection amount & now they have reached about 20 Lakh, per month. They tried to promote the brand in every household of their area. They appointed local hawkers to introduce their products to people & also they have temale employees which is quite rare to find in raral/area sub-urban areas. Their market position is also very strong in that particular area.

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Academic Supervisor

Tasnim Medha

Week: 12

Date: 8 Jan 2022 - 13 Jan 2022

List of activities with brief description:

This week I attended some organizational programs. These are described below -

17 MARCEL launched their Bigital campaign season 1? where customers can get free products every hour for digital registration.

1 Risingled is one of the sister concers of WALTON GROU They arranged an award-giving program for the real-life hero 'Md. Milon Howlader' , who saved many lives in the Abhijan-10 tragedy.

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Academic Supervisor

Tasnim Medha