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**TVS MOTORS**

TVS Motors is the third largest motorcycle company in India. TVS Motors is also the second largest exporter in India with exports to over 60 countries. TVS Group being the largest manufacturer and distributor of auto components in India should have a very strong supply control and manufacturing control throughout India. I have worked in such a company for one year, and gained a lot of knowledge regarding the management, manufacturing, customer satisfaction and approaching the target. So, I have turned my aim towards management in this time, where I was working for this company as an assistant technician and got mesmerized by the managing staff. Through this final paper I would like to explain how supply chain management was used to support the company’s business strategy. What steps could improve the company’s benefits according to future need and supply chain.

**INTRODUCTION**

I strongly believe that logistics and supply chain play a vital role in any company, basically a company or a business is a group of people who work as a group for a final output of that particular company. A company can be divided into so many divisions like production, research and development, marketing etcetera. They rely on each other, they learn from new updates, they obey the rules of the company. For example, my father works for Indian railways, Indian railways is a very big organization which runs both electrical and diesel locomotives throughout India and is improving day-by-day in technology, area and reaching the availability of more and more places. My father is specifically divided into Diesel locomotive shed- DLS, he works for Traction motor bench in DLS. There are so many divisions like auxiliary motor bench, cylinder head bench, power pack bench, electronic bench, speedometer bench etc. in that DLS. My point is even though they are divided into so many divisions, they all working for the same aim.

The company where I worked also has so many divisions and I would like to start it with explain the divisions and their importance in the company. The divisions are production, research and development, marketing, human resource management, supply chain management, logistics, accounting, financing.

Now-a-days, if we take a peek at the present case in business situations, I would want to go with the Quality administration approach, since it has such a large number of significant standards which will drive any association's procedures towards improved execution generally and critically.

Client center, which is legitimately corresponding to customer loyalty, effectiveness in assembling a quality item will make more fulfillments to clients. Procedure approach, this makes a proficiency and viability in any authoritative procedures. Constant improvement, word itself says to improve consistently in execution, adaptability in association, capacity and make new chances.

Quality administration in associations is fundamental to ensure consistency in its strategies similarly as its things and organizations. In business, shopper dependability is fundamental. As a customer's essential concern is the idea of the things or organizations they purchase, the supplier's standard goal ought to constantly be to ensure that what they produce is of dependable and fine quality.

**PRODUCTION**

The Production work attempts to exercise important association's items or administrations. Its fundamental duties are:

Invention, arranging and booking,

control and supervision of the creation workforce,

overseeing item quality, counting process control and observing,

Support of plant and equipment,

Control of stock,

Choosing the best creation strategies and manufacturing plant design,

Close joint effort will as a rule be vital among production and different capacities inside the association,

For instance,

Innovative work, concerning the ramifications of item plan for generation techniques and cost.

Promoting, concerning wanted item usefulness, appearance, quality, sturdiness, etcetera.

Account, concerning the accessibility of assets for buy of new gear and the agreeableness of stock dimensions.

Human Resource Management, concerning staff inspiration ramifications of employment plan and generation strategies.

**RESEARCH AND DEVELOPMENT**

The Research and Development work is worried about growing new items or forms and improving existing items/forms. Research and development exercises must be firmly planned with the association's showcasing exercises to guarantee that the association is giving precisely what its clients need in the most productive, viable and conservative way.

**SUPPLY CHAIN MANAGEMENT**

The supply chain should be more concerned about obtaining products and enterprises for use by the association. These will incorporate, for instance, crude materials and segments for assembling and furthermore generation gear. The duties of this capacity more often than not stretch out to purchasing merchandise and ventures for the whole association (not simply the Production work), including, for instance, office gear, furniture, PC hardware and stationery. In purchasing merchandise and ventures, buying administrators must consider various elements – aggregately eluded to as 'the Purchasing Mix', to be specific, Quantity, Quality, Cost and Delivery.

**Quantity:** Purchasing in expansive amounts can draw in value limits and forestall stock running out. Then again, there are generous costs associated with conveying an abnormal state of stock.

**Quality:** There will often be an exchange off among cost and quality in obtaining products and enterprises. Therefore, Production, R&D and Marketing Functions should be counseled to decide a satisfactory dimension of value which will rely upon how significant quality is as a characteristic of the last item or administration of the association.

**Cost:** Different things being equivalent, the acquiring director will search at the best cost arrangement while obtaining merchandise and ventures, in spite of the fact that cost must be considered related to quality and provider dependability, so as to accomplish best esteem, instead of most minimal cost as it were.

**Delivery:** The time between putting in a request and accepting the merchandise or administrations, the lead time, can be basic for creation arranging and booking and furthermore has suggestions for stock control. Providers should along these lines be assessed as far as their unwavering quality and capacity for on time conveyance.

**Advertising or marketing:** Advertising is concerned more about distinguishing and fulfilling stakeholder’s needs at the correct cost. Promoting includes inquiring about what clients need and breaking down how the association can fulfill these needs. Showcasing exercises extend from the 'key', worried about the decision of item markets and how to contend in them, for instance, on cost or item separation to the operational, organizing deals advancements, creating writing, for example, item inventories and pamphlets, putting notices in the fitting media, etc. A key movement in showcasing is dealing with the Marketing Mix comprising of Product, cost, advancement and Place.

**Product:** Having the correct item as far as advantages that client’s esteem.

**Cost:** Setting the correct value which is predictable with potential clients' impression of the esteem offered by the item.

**Advancement:** Advancing the item in a manner which makes most extreme client mindfulness and influences potential clients to settle on the choice to buy the item.

**Place:** Making the item accessible in the ideal spot at the perfect time – including picking fitting dispersion channels.

I would like to highlight the key issues which have helped me identifying and studying the importance of supply chain management and also helped the company in so many levels:

**Sustaining the competition:**  Having worked at marketing division in TVS Motors which also has many connections with management, we advertised a lot to maintained the automotive inventory in stock for customer availability due to foreseeable increase in demand; opening a channel for pre-booking. Due to competition we had to sketch so many ideas just not to lose our customers like advance booking, to maintain the supply of the product to the customers we had to estimate the analysis of how many people are going to order the bikes so that customers will not need to wait for the bike to get manufactured for them. This is also a good supply chain management, estimating and analyzing the need of product for the future. That invention of pre-booking of the product will also come under maintaining the competition.

**Protect your buyer during bad times:**This is an important factor which shows that customer satisfaction necessary. After all, customers are the one who run our business. There will be some situation for some loyal customers where we should do some favors to impress them and continue the business. For example, in my company there was a situation where one customer could not pay his installment due to a state level strike all banks were closed for one straight week and this customer did not have money for his monthly installment. If it is any other bank, the automotive company would call for a check bounce on the customer, but my manager being nice to the customer and have extended his date of payment to next month. This shows the importance of protecting the buyer during bad time.

1. **OPPORTUNITIES TO IMPROVE SUPPLY CHAIN ACTIVITIES THROUGH BETTER ALLIGNMENT OF LOGISTICS AND COMPANY’S STRATEGY**

There are thousands of opportunities one might use to improve existing supply chain practices given the required technology is handy and economical. But let’s discuss over the improvement through logistics and company’s strategic plan.

A company’s strategic plan always includes reliable sources and support that ensure consistency at providing services with optimal quality and affordability. This mix of characteristics for a supporting firm is what makes it the strategic tool of operation for parent/host Company. Aligning logistics with future plans and business expansion is vital, given the timely availability of material is important for satisfying demand; demand is not intangible under any circumstances. Outputs must be visible.

At TVS Motor Corp, we cornered our business and assumptive product demands through effectively scanning market, competition and trends that currently exists. Upon finding an optimal number of products intended to make, our logistics team shared details with 3PL’s and in-house services to determine their capacities and understand if additional services from other providers is necessary. Luckily for us our long term 3PL had enough grounds to ensure smooth flow of spare parts, engine components and other materials necessary to produce.

1. **SUPPLY CHAIN INTEGRATION WITH LOGISTICS IN ORDER TO GET GOODS AND SERVICES MOVED EFFECTIVELY AND EFFICIENTLY AND COMPANY’S AGILITY AT IMPROVING THIS**

Initially, like it’s mentioned above, we discussed with our existing 3PL’s to ensure their capacities meet our expanding business requirements. However, we wanted to upgrade our existing information sharing platforms. TVS unit we were working hadn’t had a fully functional ERP system and therefore only internal operations were based on it.

To blend in the fast-paced business world, improvements were needed. After some discussion with our sources, developments came through upgrading our strategic logistics provider with ERP enabling while also disclosing more information so they can have a finer look at the operations being performed. Through ERP implementation outwardly, the time taken for obtaining a product quotation and handling expenses shortened down drastically; we no longer had to call manually for service requests.

Also, we had a warehouse located near our unit that most of the time held minimal inventory for backup purposes. With demands climbing up, this unit was now used for main stream business activities. Our excess anticipated inventory was shipped here allowing to access whenever necessary.

Result: We were able to fill in a new customer order within 2hrs of receiving.

1. **CHALLENGES FACED DURING SUPPLIER AND MANUFACTURER INTERACTION AND ITS AFFECTS ON LOGISTICS**

Even with successful integration of our logistics service providers to support upward targeting demand, there were still challenges being faced. Manufacturers- In automotive sector, it’s no surprise there are thousands of components and most of them come from different makers. The data generated to process all these participants’ inputs for effective functioning of our business is like an ocean. You miss don’t want to miss any piece of update in it, for the operations might stall if due to lack of attentiveness.

**Critical component division:** In inventory we call this ABC analysis. Where A category products are vital and low inventory levels are maintained with high expenditures to ensure their safety and quality, B and C follow up vice versa. In a similar fashion, we used critical component division method to differentiate between high moving and low moving parts.

Engine bays, spark plugs, chassis, pistons, connecting rods, and a few others were expensive components and therefore demanded careful scrutiny over their order quantities. Upon dividing these products, with Seats, handle bars, lights along with nuts and bolts, lubricants, stickers filling category B and C respectively.

Our idea here was to order minimal quantities of category A products with order sizes for B and C category expanding even further. Our manufactures had to re-program operations for new batch sizes. This enabled time frames between each batch from every participating producer. And within this time frame, our logistics provider would gather all the products to prepare for handling and shipping operations.

1. **PROCESSES TO ADAPT FOR INCREASING CUSTOMER VALUE**

Customer experience plays a pivotal role for the advancement of any firm. We valued our customer and had different channels to take their inputs that would later enhance our service qualities.

At TVS, we had 4 different customer service levels.

1. In-bound customer service quality- for everyday improvements
2. Customer suggestion over service - for after sales service quality improvements
3. Monthly feedback- for overall service improvement
4. Feedback for every new product launch- for long term improvement
5. **In-bound customer service quality- for everyday improvements :**  
   This was our daily improvement category. Customer feedback on store layout, ease of understanding our sales team, behavior issues in our unit etc. were well addressed. Anything that violated these was quickly brought up for correction.
6. **Customer suggestion over service - for after sales service quality improvements:**

We also had a service station for regular vehicle checkups and general service visits. These are a company’s most complained units. People bring repairable products which were results of mishandling and rough usage. The blame however is generalized onto its seller. We therefore ensured to take after service feedback from our customers and emphasized on implementing it upon finding a practical feasibility of such inputs.

1. **Monthly feedback- for overall service improvements:**

We had a team dedicated to conducting monthly audits over customer service concerns. This team would ask random customers to give inputs over their overall feel of the product and service experience. A standardized scaling system was being used to determine their experience. These points included minor product concerns, spare parts quality auditing etc. This made easy navigating our low graded supplier who stepped back at quality; triggering for either service improvement commandment or supplier rightsizing/filtration altogether.

1. **Feedback for every new product launch- for long term improvement:**

Each time our products were launched, a major audit was performed right after a couple of months to take vital inputs from users over design, performance or quality concerns. These were very important for the organization since the long term effects if ignored can dramatically affect our business.

For example, in 2012 TVS refreshed Apache RTR- a famous mid-range motorcycle aimed at young riders. Although the performance and quality was well praised, people just hated the bloated console/instrument cluster design which was far cry from the slick units in previous gen models. TVS quickly sprung into action and corrected this with next face-lift model.

Hence, using all this data TVS made sure every aspect of the business is well updated to keep customers satisfied, ringing all the right bells and whistles.

1. **IMPACTS OF SUPPLY CHAIN MANAGEMENT ON VARIOUS ORGANIZATIONAL FUNCTIONS**

In India unlike developed nations, Supply chain mostly remained old-school until 2010. With technology curve climbing up like a fighter jet off the air force carrier, our innovation strategies went through extensive overhauling right from 2010. Supply chains were no more simply pushing orders to consumers. It was now the other way around.

We were solely based on demand and had to pull customers rather than pushing salesmen to sell more. Smartphone’s exposed every bit of information making up for a see through business practices. This was therefore good and bad for our organization.

At TVS the technology initially had our sales shrink. Technology helped us understand all the flaws being made at manufacturing units and we had to source an idea to control this. 2 major changes were made following this.

1. Cross-functional work culture
2. Clan-culture welcomed, hierarchy eliminated
3. **Cross-functional work culture:** TVS trained its employees to mend in variable working environments. A newly hired candidate was trained 60% for his job role while 40% of the remaining went into improving his mechanical, marketing and involvement in R&D. Through this implementation, groups were divided. Each group had someone mastering at least one part of the business, resulting for a highly productive collaboration.
4. **Clan-culture welcomed, hierarchy eliminated:** Clans are well known to take inputs from just about everyone in the business and use it for overall improvement. At TVS, we believed ideas come from different sources and these sources don’t necessarily are related to the subject. Ideas were now being made available by everyone allowing for an excellent improvement of our company operations. Also, eliminating hierarchy resulted in higher employee satisfaction and goal management.
5. **FINANCIAL IMPLICATIONS OF IMPROVING SUPPLY CHAIN MANAGEMENT FOR THE COMPANY**

Cutting edge technologies apart from improving businesses also take a toll on company’s finances. Simply put, an organization has to risk everything in anticipation of the new idea/technology to return it at some point of time. These are basically intangible and tangible assets for the firm.

Working at TVS, I have witnessed many technology changes. ERP integrating with outbound business partners although was a successful measure, the initial investment to obtain systems, integrate this software, train employees and business participants consumed major chunk of our resources.

This might seem irrational to the statement above. But without competition soaring up we really didn’t need to do this. High-compression metal cutting machines were needed to support TVS’s new line-up of RTR suffixed motorcycles. They required were high revving engines. Meaning 180CC engine now had to put power outputs matching 250CC units while fortifying engine longevity, quality, reliability, and performance consistency. Our manufacturing plants had to be remodeled in support of the shift from existing metal cutting machines to these high-compression units. Our whole supply chain had to update in lieu of this changeover. A lot of supplier selection process happened for distributing rigid yet high tensile low carbon steel to support our new product requirements.

All in all, improving supply chain might look pleasing at first glance. But without understanding the technologies implication in our future businesses, the capitals invested might drain for no good reason.

1. **“BEST PRACTICES” AVAILABLE TO SUPPORT MY RECOMMENDATIONS**

Following are the best practices I believe can make a difference in not just TVS motor company but any organization.

1. **Customer centric industry:** Customer is the pivotal director of any business. Company’s must value customers for they are your product consumers and without them there is no point of having a business. Their inputs, interests, values, trust is everything an organization needs for a mutual advancement.
2. **Diversified Cross-functional team:** Businesses must adapt cross-functional working culture to enhance productivity and idea development. When multiple minds from variable concentrations combine, the outputs are bound to come with astonishing refinement.
3. **Data analytics integration:** In this modern world, we are surrounded by highly capable tools such as SQL, Machine learning, data analytics etc. These are tested and tried methods that enhance demand forecasting outputs.
4. **Real time data sync:** Without real time data interpretation, one cannot sustain the demands of this increasingly changing business environment. Systems such as ERP, SAP, blue-link etc. can really make it possible. It has to be made standard in every organization.
5. **Frequent auditing:** Keeping a close track of the happenings in and around an organization will entail the business keeps growing while filtering all the flaws and issues.
6. **Collaboration and coordination:** Using capitals to expand business is an old strategy. Modern business demands collaborations to cut costs while maintaining efficiency. Collaborations are a boon to the business world where quality and cost always compete.
7. **Trends and competition:** In modern world no business survives solely on using same technology then and again. One has to shift with the current trends for being inline or ahead.

**CONCLUSION:**

My current course added with previous work experience at TVS Motors has had me realize the importance of Supply Chain for the business. Taking into account suppliers, manufacturers, work-force, logistics, distributors, after sales services, trends, competition, technological change, and customer interests, Supply Chain has the biggest responsibility to balance everything making sure each and every process runs in harmony with others.

BIBLIOGRAPHY/REFERENCES

April 28th 2019, The Open University, Open Learn, Article: Organizations and Management accounting.

Retrieved from: <https://www.open.edu/openlearn/money-management/organisations-and-management-accounting/content-section-4.1>

May 1st 2019, TVS Motors company, Wikipedia, Article: TVS motors.

Retrieved from: <https://en.wikipedia.org/wiki/TVS_Motor_Company>

May 1st 2019, Author: Hitesh Bhasin, Marketing 91, Article: ABC Analysis in inventory Management.

Retrieved from: <https://www.marketing91.com/abc-analysis/?fbclid=IwAR3wUx23FrCFn15A6VDBJCoLw0xr_iRe9SanUbb_ACJcr3QPMYNu5AyldxE>

Burt, D. N., Petcavage, S., & Pinkerton, R. (2009). Supply Chain Management (8th ed). Boston: McGraw-Hill.