

Tomato Processing Industry Management

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Abstract-The aim of this article is to device strategies for establishing and managing tomato processing industry, which aims to enhance the taste experiences on different tomato products for the people. Management needed for a successful business is analyzed in each and every aspect. The five important steps in management- planning, organizing, staffing, leading and controlling are applied in management of the industry. Planning- In the planning process, activities required to achieve desired goals are thought about. This process involves the creation and maintenance of a plan, those include psychological aspects that require conceptual skills. Organizing- Organizing is a systematic processing in order to attain objectives of structuring, integrating, co-ordinating task, and activities. Staffing- Staffing is the process of acquiring, deploying, and retaining a workforce of sufficient quantity and quality to create positive impacts on the organization's effectiveness. Leading- Communicating, motivating, inspiring and encouraging employees are key aspects of process of leading, task of which is towards a higher level of productivity of organization. Controlling- Controlling measures the deviation of actual performance from the standard performance, discovers the causes of such deviations and helps in taking corrective actions.

Keywords- private-pvt; Newgen Lycopersicon-N.L.; limited- Ltd.; Department-Dept.; Strength Weakness Opportunities and Threats-SOWT;

I. COMPANY INTRODUCTION

Company Name: Newgen Lycopersicon(Pvt) Ltd.

Tag Line: "Global innovators in tomato products."

India is second in Global production of tomatoes. Despite the huge production, only one percent of the tomatoes produced are processed. To elevate the status of India in tomato processing, Newgen Lycopersicon enters the market with the aim to process one in every hundred and fifty tomatoes grown in the Indian subcontinent. The company comprises various units for growing and processing tomatoes and let the products cross boundaries.

We like to enter the heart of the customers by introducing innovative products which would make history, moreover give varieties those having an indigenous touch. The products introduced by the company should suffice the needs of a wide range of customers across the country.

N.L. (pvt) Ltd. is a private limited company partnered by four members, and managed by a board of directors. Presently, there are two plants in the Trichirappalli region and

two plants in the Coimbatore region, with headquarters at Trichirappalli.

Vision Statement of the Company: To be the global leaders in the production of varieties of processed products from tomato imparting the diversified global tastes in them.

Mission of the Company: To give satisfaction to customers and give them opportunity to choose what we prioritize is innovation in products. To provide a well balanced work and life in the firm for the staffs thus creating a well established environment that encourages intrapreneurship in the company.

A) Phases of the Company

N.L. existence in the society will change the conventional mindset of people on the tomato products, giving a new dimension to tomato processing in particular and food processing in general. This company will lift the country's status in food processing by contributing to innovations in the field. The initial growth of the company depends on the reach of different products to people and create a sustained place in the kitchen shelves, and refrigerators. As the development of the company proceeds, objectives move to propagate the mission of the industry through the staff, and let the products cross the boundaries reaching international standards.

B) Raw Materials

The plant setup is planned in the districts of Trichirappalli and Coimbatore, these are two important districts out of the five (Trichirappalli, Karur, Tirupur, Coimbatore, and Dharmapuri districts of Tamil Nadu in India), which form tomato production belt in Tamil Nadu. The plants are setup near the farms, thus the quality of tomatoes obtained is more or less same throughout the production period. The encouragements and other encouraging activities are regularly performed to tighten the establishment between the company and the farmers. The highlight for N.L. (pvt) Ltd. is that the prices are fixed only by the farmers thus giving them priority. No middle-men is allowed between company officials and farmers, ensuring that the farmers get their profits and grants without any disputes.

C) Internal and External Environments

The firm depends on internal and external environmental factors. The external environment comprises of people with different taste preferences and competing

industries like Hindustan Unilever, Del Monte, Nestle India, Global Green, Indira Foods, etc. People's awareness on tomato products is restricted to ketchup and puree. Our strategies to overcome this issue

- Introducing products which reduce time spent on cooking by the household.
- Attracting the bachelors or people away from home, by instants with a family touch.
- Capturing the Kids based market by imparting tomato flavours in different regular products making them attractive.
- Reaching people with creative ads and reengineering the products to makeup trends.

D) Market Competitions for Tomato Products

The market for ketchups and puree is crowded with leading organizations like Hindustan Unilever, Del Monte, Nestle India, etc. Their names are strongly affixed and related to these products, main difficulty is to compete with these giants and drill our products into the market. The types of competition that would exist for the firm are

- Initial slow rate of popularity of products
- Political and legal complications during start-up.
- Production line stabilization.
- Getting qualified managers for all departments in all plants.
- Getting quality tomatoes irrespective of seasonal variations.

E) Products of the Company

N.L. (pvt) Ltd. enters the market with large production of usual products like puree, ketchups and paste, as well as limited production of innovative products which are introduced in the market, the rate of sales and popularity is studied for different products and rate of production and place specificity of products are found and further steps are taken for the development of the company. The different products produced in different plants of the N.L. (pvt) Ltd. are,

- Puree
- Ketchups (hot, sour and spicy)
- Chips
- Jam
- Toffee
- Instant Rasam Powder
- Pickle
- Instant Tomato chutney
- Tomato Soup powder
- Tomato rice paste

As the industry develops and creates a permanent place in the market for the tomato products, then innovative products are introduced. Those are,

- Tomato wine
- Canned tomatoes
- Cherry tomatoes
- Tomato syrup
- Tomato cream
- Tomato butter
- Tomato cosmetics

Due to generation of organic wastes in the production line there are by-products which are processed for producing income generation, like

- Composts
- Bio-fertilizers
- Bio-gas

F) Sales and Marketing

Sales of the processed precursor products are targeted to, hotel and society kitchens, in bulk. The instants are targeted to the working class and bachelors. Products like toffees, chips, etc. are targeted to the kids. The first category marketing is done directly by establishing bonds and agreements for a period of time. The next two categories require high level of marketing and advertisements, and the sales are mostly not direct but through retailers. It is very important to have a well trusted and established relationship with the retailers for good sales. Our sales and marketing would be based on the following strategies:

- Attend agricultural exhibitions, to strengthen relations with the producer.
- Organize academia relations in order to enhance the innovations.
- Advertise our product in newspapers, TV, and other media.
- Leverage on the internet to promote our business through social networking sites.
- Direct marketing.

II. FINANCIAL PLAN

A) Pricing Strategy

Our prices will ensure that we design and manufactured products that will meet the financial capacity of all range of people of the society. The product will be competitive with the affordable products which already exist in the market.

B) Budget

These are the machines, equipment and tools that we needed to start our production line,

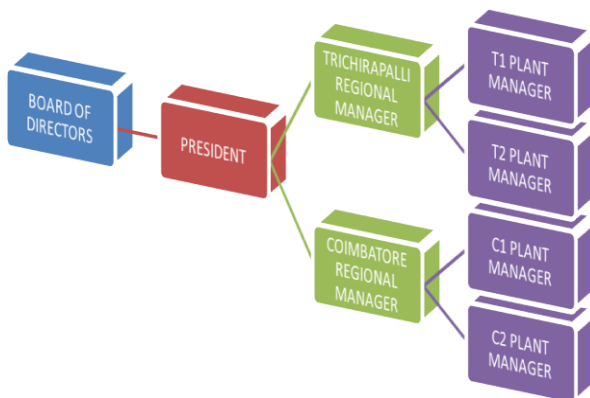
- Transformers (power sources)
- Crushers
- Grinders

- Agitators
- Pipelines
- Pumps
- Compressors
- Driers
- Extractors
- Conveyors
- Washers
- Seed removers
- Differentiators
- Water treatment
- Disposal units

The key areas of investment are,

- Production line procurement
- Production line instalment
- Instalment of Waste Treatment Plants
- Instalment of Safety parameters (Fire prevention, Air and water pollution control and Sign boards and notification)
- Acquiring licences and Registration of Plants
- Budget for publicity and advertisements
- Insurance coverage, for general liability, theft, workers' compensation and property casualty, at a total premium is monitored.
- Cost of implication and maintenance of applications software and technical software
- Cost of designing, remodelling and re-engineering
- Annual/Bi-annual cost of maintenance of the plant
- Operational cost of the plant

III. ORGANIZATIONAL CHART



A) Departmentation:

There are seven Departments under a Plant Manager. They are Production, Research & Development, Finance,

Safety, Marketing sales, Utilities, and Administration. There are four such Plant Managers and two Regional Managers will guide them. The President passes orders for these Regional Managers and finally the overall management is handled by Board of Directors.

1. Production

Procurement: Acquiring raw materials, services from an external source. This is kind of a strategic function to improve our company's profitability. It helps our company finding better sources with low raw material costs with good quality ultimately leading to fine product.

Product: There are different products produced in the plant, each product is monitored and managed by qualified managers under this branch.

Packing: A safe packing is made so that our product reaches the customer safe and sound without destroying the quality & taste of product. Some of our products are available in tetra packing, a few of them in recyclable plastic bottles and some of them in sachets. All our packing materials are recyclable.

Quality Control: Quality Control branch manages a system for maintaining standards in the manufactured products by testing a sample of the output.

2. Research & Development:

Enrichment: This division works on improving the quality of the product with new standard methods and low waste generation with utilization of minimum available resources.

Innovation: A special division which works on producing new products from the raw materials. We are also trying to develop packing materials which will be bio degradable and eco friendly. For "easy handling no spilling" policy, we are also trying to replace the old ones with our advanced material so that our customers are benefitted.

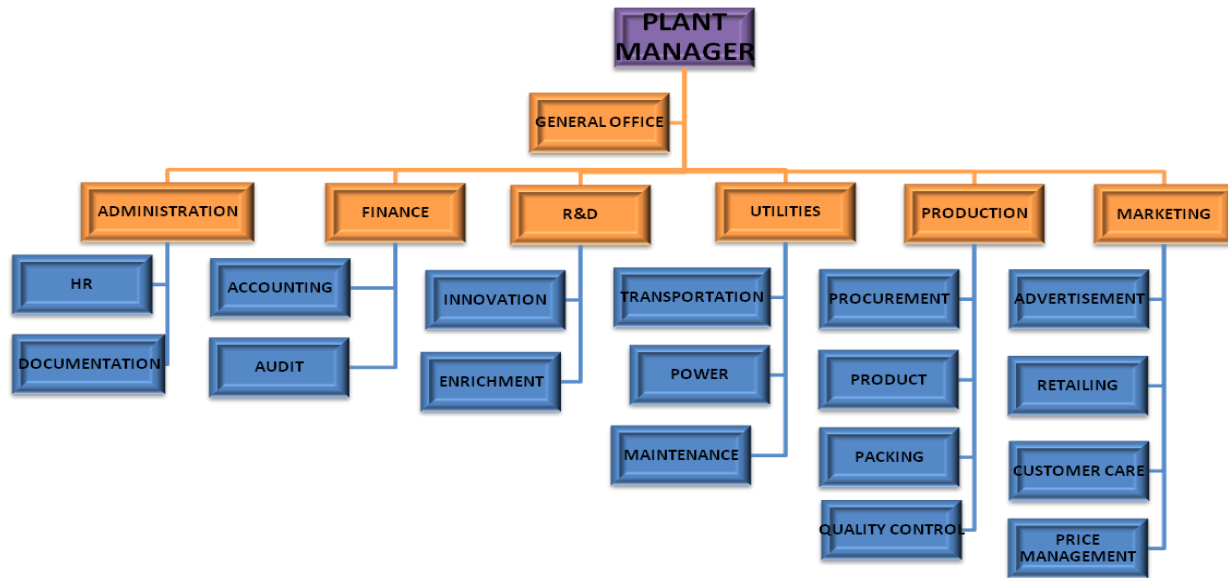
3. Finance:

Accounting: It is aimed at the determining the level of adequacy of cost accounting in our company's production activities.

Auditing: An official inspection of our Company's accounts which verifies on any fraud/treachery.

4. Safety:

Production Line: Safety of our Production line is our important concern. This issue keeps us withstand the race in the market and ultimately leading to success. Special teams are recruited to prevent any accidents or failures. Highly efficient equipments were also installed to react before any accident hits. Safety of both equipment and the staff is under great care.



Work-life: Attractive benefits beyond pay such as festivals, summer, other parties promote the sense of community among our employees and are therefore the part of our company's philosophy. In addition, we provide social benefits to employees' family.

5. Marketing & Sales:

Advertising: To create awareness about our products and increasing our sales, we have planned our advertising strategy which targets audiences over all classes.

Retailing: Retailing branch allows us to focus on producing goods without having to be distracted by the enormous amount of effort that it takes to interact with the end-user customers who want to purchase those goods. Describing the features and benefits of products, steps are taken to get the right products at the right price to the right customers at the right time. Our products will be available on online markets in Flipkart, Amazon, and ebay without any additional tax charges.

Price Management: The mission of the branch is to optimize price of the products and value realization for of customers by providing nominal pricing and collaborative capabilities across the company for reaching objectives. The branch recognizes complex dynamics of pricing of the products and also recognizes interaction across companies, functions, and stakeholders due numerous factors that can differ greatly. Our flexible pricing platform enables organizations to leverage price science and best practices without discarding the nuances and characteristics that make their pricing requirements unique.

Customer Care: An important role of the customer care in our organization is solely for the satisfaction of our customers. One well established and satisfying customer service experience would change the entire perception that a customer holds towards our organization. We spend more time in training employees for interacting with the customers for their valuable feedback.

6. Utilities:

Transportation: Transportation of goods is through Rail and Road. "Short distances" is the maxim for the internal movements of goods by truck and rail. They are coordinated with one another via a control system so that the distances are kept short and there are no empty vehicle movements.

Power: Our plants require only twenty five percent of the power from the energy grid. We are backed up by solar energy using photo-voltaics in an efficient way. Also Bio-gas generation plant is sanctioned for the use. So within no time our company will be eco friendly and self dependent.

Maintenance: This includes inspection, cleaning, rebuilding, alteration of parts, accessories, coatings and others making the working environment safe and reliable. Special teams are dedicated for this maintenance work preventing any failures. Special care has been taken about the effluents released. Water is treated through several stages and recycled back. We have advanced technologies which trap rain water and use it for other purposes.

7. Administration:

Human Resource: The Human Resources Department is established to encourage and maximize employee

performance in service of an employer's strategic objectives. Our HR is primarily concerned with the management of people within organizations, focusing on policies and on systems. It deals with issues related to employees such as hiring, training, development, compensation, motivation, communication, and administration. They serve as a link between our company and the employees.

Documentation: It ensures the existence of well established documented evidence, traceability of the process to provide records and an audit trail that will permit investigation and also to check the availability of the data needed for validation, review and statistical analysis

8. Staffing:

Staffing plays an important role in running the company. It becomes complicated considering the variables unique to each hiring situation. The really important task is to define the roles and responsibilities so that the work assigned can be completed in efficient ways with peer perfection. It requires clear preparation and thorough execution. The selection process of the organization includes interviews, eligibility tests and the use of assessment centers. To avoid dissatisfaction and employee turnover, we ensure that new employees are introduced and integrated with the other persons in the organization. To attract employees, we have advertised in professional associations, educational institutions, etc. There is no Gender Bias in our company, if the candidate meets the required qualities he/she will be hired immediately.

Our employees will work in a specific culture in which one can participate in the decision making process. He/she will be evaluated based on performance criteria rather than other unnecessary categories. For the Dual-career couples, with both partners working, we have created a flexible approach that involve relocation, considering the needs of both partners in career planning, helping to find employment for the spouse either within the company or outside included with maternity leaves and day care services for children.

We also provide quarters for the staff both temporary and permanent employees based on their grade pay. These quarters are all arranged with all basic amenities. Additionally a clinic with dedicated staff is sanctioned for the health care of the staff and their family members.

IV. SWOT ANALYSIS

Strengths

- High end technologies in place, with enthusiastic, qualified and dedicated employees.
- Fully facilitated premises.

- Establishment of precise quality control.
- Being close to place of tomato producers.

Weakness

- The brand is new to the market.
- Most of the products are completely new to the society, thus people will hesitate to try new products.
- Comparatively less financial capacity to compete with high profit earning companies.

Opportunities

- The new products introduced are completely new to the market, thus have wide opportunity to capture the market.
- Due to proper organization, financial support can be obtained from many sources.

Threats

- Unpredictable economic bottle-necks, those might invert the finance of the company, affecting purchasing and production power.
- Drought might affect the production of tomatoes, thus reduction in production of products.

V. FURTHER STATERGIES

- Branding strategy and framework is always done around the vision and mission of the company.
- Frequently conducting technical studies and designs to introduce changes for enhancing the production rate or product quality.
- The product differentiation is important because expands it the market strategies open to the producers and makes the firm's demand less elastic.
- Development of consumer needs and the development of the world tomato products suppliers, drive the company towards further enhancement of our products.

BIBLIOGRAPHY

- [1]. H. Koontz and H. Wehrich, Essentials of management. New Delhi: Tata McGraw Hill Education Private Ltd., 2010.
- [2]. S. Geoffrey, N. Hillary, K. Antony, M. Mariam and M. Mary, "Challenges and Strategies to Improve Tomato Competitiveness along the Tomato Value Chain in Kenya", International Journal of Business and Management, vol. 9, no. 9, 2014.
- [3]. Maria de Fátima M. Lorena de OLIVEIRA, " The Portuguese tomato processing sector: market structure, concentration and firm behaviour ", New Medit, vol. 8, 2008.
- [4]. A. Brown, "Quality Management: Issues for Human Resource Management", Asia Pacific Journal of Human Resources, vol. 33, no. 3, pp. 117-129, 1996.
- [5]. K. Kawamura, "Good Manufacturing Practice for Investigational Pharmaceutical Products in Japan", Drug Information Journal, vol. 28, no. 4, pp. 997-1001, 1994.