A Case Study

On

Gopal Glass Works Ltd.

By

Dr**. Sweety Shah (Assistant Professor) with following students of MBA**

Student Name
RavalUmang
Keval Gandhi
Patel Maulikkumar
MehulDabgar
DabgarDharmesh Kumar Chimanlal
RajdeJigarkumarNanalal
Sengar Amit
Patel VaidehibenNimeshkumar
Priyank Patel
JayprakashVegda
SametriyaKrunalkumar K
MonilHitarthbhai Shah
Adesara Gaurav
Patel Maitri
Patel Vipulkumar

under

Vikalp – Case Study Forum

L J MBA

2013-14

ABOUT THE VISIT (EXPLORE)

As a part of Explore (Industrial Visit), a group of student along with a faculty was directed to visit aMicro, Small-scale or Medium scale enterprise registered as an SME or MSME. The objective of the Industrial Visit is to help students to gain firsthand information regarding functioning of the Industry,which presents the students with opportunities to plan, organize and engage in active learning experiences both inside and outside the classroom. So to give a practical exposure and to understand the application of theory into practice.

At company we were welcomed by the manager of the company and he directed us to conference room. Owner of the Gopal Glass, Mr. Purvish Shah met the students and gave brief introduction about the company. Mr. Purvish Shah notified production head of plant Mr. Mani Iyer for plant visit. We started with the office, and went ahead to the plant-I, where initially, we saw the warehouse, where the raw materials were stored. From this warehouse, these materials were taken to the plants where the machines were kept. The machineries in the plant were automatic and after the each job process once the final product was ready, it was taken to the cutting area and then to packaging department and stored there. After plant-I visit students were also taken to plant-II where different designed glass sheets were being produced. During the plant visit, the students talked to workers at plant. It was very informative plant visit and students were satisfied with the automatic processes seen in the industry.

Then, we were again taken to conference room where Mr. Purvish gave more insight about the other parameters of the company and details related to it and even answered for various questions of students related to organizational functioning, finance and marketing issues. Having finished the meeting, we thanked the owner for his co-operation and left the plant around 2.30 pm. It was an informative, interesting and successful visit. As being management students, with even no technical background, they learned a few technical and mechanical applications about the plant as well managerial functions of a company.

Case Study: Gopal Glass Works Ltd.

About the Glass Industry in India:

The use of glass is of critical importance in the present day when environmental conditions are already a concern for protection of environment in the interest of human health and wellbeing. Glass which is made from all natural, sustainable raw materials proves to be 100% eco-friendly. Preference for Glass is due to its being chemically inert and pure nature. Key properties such as transparency and recyclability make glass the most suitable medium of packaging for liquors, pharmaceuticals, lifesaving drugs and food items. The perception of glass having high quality or premium image is also facilitating its growth. The growth in flat glass demand is cyclical to economic growth and, subsequently, is prone to economic fluctuations, within the Construction, Automotive and Solar Energy sector which remains the biggest consumers of flat glass. Flat glass is poised to outpace GDP growth for the next 10 years; in continuation of historic momentum displayed. The Global Flat Glass Market was worth $77.7 bn in 2013, and estimated to grow robustly over the next 10 years. The majority of raw materials required by the industry are available locally providing excellent scope for growth and development.

About the Company:

In 1978, 9th January Mr. J.J. Shah and Late Mr. D.C. Sheth started Gopal Glass Works Ltd. Together they started and succeeded in shaping the company. They started with the production capacity of 50 tonn per day in single plant, now Gopal glass has production capacity of more than 240 tonn per day in total 4 plants established. As change is the only route for the success and survival, from the modest beginning, Gopal Glass has now grown into a full fledge unit, complete with a team of professionals working on the most modern machinery in a clean, healthy environment. The total 400 number of employees are working in corporate office as well in manufacturing units of Gopal Glass Works Ltd.

Gopal glass is engaged in manufacturing in Patterned (figured) glass, Rolled glass and Wired glass in both flint and tinted form with variety of designs having several designs patended and is Green power producer with non-conventional energy. The company also provides consultancy for establishing the turnkey project to patterned glass manufacturing.

Products and Services

The major products of the company are varieties of patterned float glass like Jaccuzi, Pinhand, Kasumi, Victory, Reeded, Diamond square and Wired Glass. The usage of these designed

glasses is in residential, hotels, hospitals and commercial infrastructure sector for different interiors. The company has also started consultancy business for establishing manufacturing unit and has provided services in Nigeria for African Fertilizers and Chemicals Nigeria Ltd.

Production Process

For manufacturing the flat glass they use the float process in plants which can be operated uninterruptedly continuously 24 hours a day. Flat glass is primarily made of raw materials like sand and soda ash, but also from recycled glass i.e. 'cullet'. Mixing recycled glass with raw materials allows a reduction of CO2 emissions from production and contributes to greater product sustainability.The raw materials are then charged into a large furnace to be melted at 1600°C. They combine in a process of physical transformation to form molten glass. A continuous ribbon of molten glass is fed out of the melting furnace onto the surface of an enclosed bath of molten tin at 1100°C. The molten glass literally floats on top of the tin, and as it flows along the surface of the tin bath away from the delivery canal it forms a ribbon of uniform thickness. Thickness is controlled by the speed at which solidifying glass ribbon is drawn off from the bath.The glass is then lifted from the tin bath onto rollers to be cooled down. At this stage the internal stresses are released ensuring perfect flatness.Once cooled down and solidified the glass goes to the cutting area where it is cut in to a large sheet of 'jumbo size' or 'cut-size' which are specific to customer orders, before being stacked for transportation. The production process remains for different products only the design die will be changed as per the order.

SWOT Analysis:

Strengths

- Innovative research and development
- Huge entry cost is strength to prevent large number of players entering
- Demand in infrastructure projects and buildings
- Demand in Automotive segment
- Recyclability (90%)

Weaknesses

- Diseconomies of scale
- Over leveraged financial position
- Capital intensive market
- Poor supply chain
- Dominated Un-organised Industry
- Surplus capacity during Boom
- Rising input cost
- High interest rate
- High energy rate

Opportunities

- Asset Leverage
- Access to Financial market to raise money through debt
- Bring future innovation through R&D
- Expansion of applicability into new industries
- Increased acceptance of Green building concept
- Positive Economic changes
- Positive growth in GDP

Threats

- Demand slowdown for related industry
- Interest rate risk as industry in capital intensive
- Exchange rate risk
- Threat from Substitute products
- Price wars among players
- Cheap imports from outside countries
- Devaluation Rupee-Dollar.

PESTEL

Political

- Stable Government predictable policy
- Manufacturing friendly

Economic

- Open, Investor friendly, growing economy.
- Global economic recessions affect consumption
- Inflation concerns
- Overall favorable economic conditions

Social

- Perceived as status symbol
- Consumption is directly proportional to income

Technological

- Primitive technology in use
- Scope of improvement and benchmarking in automation, product development, design, skill development needs huge capital investments.

Legal

- No glass industry specific legal issues.
- All general laws applicable to glass industry including; waste disposal and safety standard.

Environmental

- Glass is 100 % recyclable and hence it is environmental friendly
- Highly energy intensive.

Porter's Five Forces Model

Threat of New Entrants

- Threat of new entrants in Glass industry is very low. The capital investment is very high. Glass manufacturing is very technology intensive and requires highly skilled people hence new entrant find it difficult to enter.
- Economy of scale created by Gopal Glass is deterrent for new comers.

Degree of Rivalry in the Industry

- Although glass being a commodity, price plays an integral role in competition. Major players like ASAHI Glass, Saint Gobain, Gujarat Guardian etc. have come up with their strong brands and aggressive branding strategies. Strong dealer network established by the major players. Hence the internal competition is very high even from unorganized sector players.

Threat of Substitute

- Threat of substitute for float glass is comparatively medium. Major substitutes are cement, bricks, steel, wood, fiber plastics.

Bargaining power of Buyers

- Bargaining power of buyers of float glass is medium. The nature of the industry is oligopolistic.
- Over 95% of the trade happens through dealers to the institutional buyers.
- Switching power of end users is low since no perfect substitute for glass.

Bargaining power of Suppliers

- Key suppliers for float glass manufacturer are Sand miners, Soda Ash suppliers, Electricity and gas suppliers and supplier power in float glass industry is high due to the availability of the raw materials.
- The raw material sand is also a raw material for many other industries like construction industry and this industry is traditional price taker.

Challenges faced by Company:

- Low GDP Growth: General slowdown in the economy. According to current projections the GDP will continue to stay below the 6% mark.
- Lack of Demand: Sluggish demand in construction and automotive segment.
- Surplus Capacity: Many of the big players have added capacities in last years. Capacity utilization of float glass is below 75%. Price bargaining power reduced. No increase in the rates due to demand-supply mismatch.
- Rising Input costs: Increase in input cost- raw material. Mining issues across states with respect to Govt. delaying mining leaves have added to the woes.
- Exchange rate fluctuation: Fuel and gas have direct cost of glass product. Increase in the prices of soda has contributed to the rise in input cost.
- Buyer Concentration Risk: There isa need for companies to diversify usage. There is too much concentration some segment.

Landmark

- The company is pioneer in manufacturing 2 mm Anti Glair Rolled Glass which is widely used in photo framing.
- The Diamond Square design is a patent of Gopal Glass introduced in 2002, is no.1 design in Indian figured glass industry.
- Other designs like Alaknanda (2002), Jacuzzi (2005), Sun light (2005),Swastik (2007), Crown (2007), Crown (2007) and Twinkle (2008) are the other patented designs in the basket of Gopal Glass ltd and working well in market.
- Company is the first Gas based furnace in India was established in 1989.
- It is the only company which spreads in 90% of the Indian Figured Glass market.
- Company consumes Green Power generated from Wind Energy and contribute to the environment protection by reducing hazardous emission in the atmosphere.

Customer overview

This business works on a “made to order” model. So an advance contract is made with the customers and production is scheduled accordingly.

Employees’ Say

The employees are governed by the Factories Act and the same rules in case of wages, working hours and safety are applicable to them. The employees who worked on the machines have to be careful about their safety. However, the management assures that there have been no problems related to safety with their employees.

Conclusion

The company works at full capacity and has international clients. The competition is very low and the company has established its image of being a quality-conscious company. So without many extra efforts on marketing and promotion, the company is on the sustainability path. The company aims to expand its production capacity, so that more orders can be accommodated.