Capacity planning and timing strategy business essay



This report discusses a case study on capacity planning and facility location at Georgia Pacific a company that has undergone growth. The case study illustrate the importance of growth and its linkage to the environment. The report first start with defining the capacity planning and control then looks at capacity-timing strategy Georgia Pacific uses and the factors that influence this strategy. Then looks at major factors that it used to make its capacity expansion decision and what other factors might the company have considered. The report then further explain the technique Georgia Pacific used to make its facility location decision and what other facility factors might the company have considered. Also the report looks at how environmental considerations affect capacity planning and facility location at Georgia Pacific and lastly in my own opinion explain if Georgia pacific has made the correct capacity planning and facility location. Finally the report concludes with Georgia pacific production style, the manner in which the company operates as a team, its environmental consideration and decision making process.

Definition on capacity planning

In operations management, capacity is referred as an amount of the input resources available to produce relative output over period of time.(citation)

Strategic capacity planning is important in an organisation mainly because its facilitate the organisation to meet its future requirements. Planning guarantee that operation cost are kept at a minimum level without affecting the quality, it also guarantee that organisation remain viable to attain its long-term plan for expansion

Capacity planning and timing strategy

Long range capacity planning and control primarily depends on a range of factors and some of the factors Georgia-Pacific used base on the on changes in capacity are

Market conditions: The timing of the market and making a decision base on the market gives the organisation a competitive edge as well as an increase in market share. Georgia-Pacific have used these strategy to increased its production capacity base on the changes in the market, as the market grew production was increased so as to meet the demand.

Technology: The change in the technology means organisation, required fewer resource to operate its production and therefore this means that with the advance technology Georgia-Pacific can increase its production ability with only slight equipment changes.

Equipment: So to achieve a large increases in production capacity, Georgia-Pacific use improving the already existing equipment, or set up new equipment,

The major factors that influence the buying of sawmill is because of the strategic location of the sawmill and since the capacity of the sawmill was restricted in 1970 when it was first built buying it 1987 and expanding the operation such as adding drying kilns, a planner mill for finishing on site and a warehouse for storing the finish lumber to improved production capacity and the fact that the plant has the basic equipment and the has company owned forests in the area were more economically viable.

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Factors deciding the expansion

The timing in making a decision to expand a business is vital, as you need to carefully study the fiscal benefits of such expansion such as assessing having the cash for the investment to cater for the additional inventory, new facilities or equipment. At Georgia-Pacific the various factors considered in deciding whether to buy and expand the sawmill in Florida for example are

Market conditions: Florida has an excellent market condition such as the speedy growth of population and the boom in home construction because of these strategic position of the location of Florida gave Georgia-Pacific an edge over their competitors

Raw materials â€" Georgia also considered this site because it own forest in the area that also had other position of privately owned timber.

Environment- That the other major factors to consider was legislation and government policies regarding the environment Georgia Pacific considered this factor and assessed the environmental regulation of Florida and find out that Florida has more strict environmental regulations that make it hard to build a new plant than to acquire an existing plant.

Economics- This is a major factor to considers when planning for capacity expansion as this affect the economic viability of the organization. Georgia pacific has considered this factor by analysing the return on investment when acquiring facilities and found out that acquiring and expanding was much easier and economically viable that building new facilities.

Labor â€" The availability of labor both skill and unskilled is very important when considering making a decision for capacity expansion. As for Georgia pacific the nearby facility mean that the sawmill could draw some trained personnel.

Equipment â€" As for a long term capacity expansion the availability of equipment to carry the operation is a major factor to consider. For Georgia pacific the already existing sawmill had the vital required equipment and facilities such a functioning road system, a nearby rail road spur, and electricity facilities.

Overall at Georgia pacific acquisition of the sawmill offered exceptional potential for capacity expansion and the sawmill was expanded in 1998 hence greatly contributed to the success of the Georgia pacific.

What other factors might the company have considered Other factors include

Facilities location decision

The decision on where to locate facilities is the most important factors in capacity planning and its where the success of the company depends.

Facility location involves organisation seeking to locate, relocate or expand their operation, the decision process encompasses the identification, analysis and evaluation of a selection among alternative,

Since at Georgia Pacific facility location mostly involves long term commitment of resources the decision on where to locate facilities are

mainly affected by several factors such as financial, capacity and technology as well as political, economic and social..

However in the case study at Georgia pacific corp. the main focus of consideration are raw material, market condition labor force, government regulation and policies and finally energy utilities

Market condition- Georgia pacific asses the market condition by serving so as know the demand and place the product close to the location.

Raw materials- Georgia pacific review the availability of raw so to have adequate supply of locally available raw materials at a low price

Government regulation- Georgia pacific choose where the state and local government welcome companies by looking at factors where they have relax tax and environmental policies as well as attitude of the local towards industry such as florida

Labor- Georgia pacific have assessed the availability of local work force that can be easily train

Utilities- Georgia pacific have considered the availabilities of all utilities necessary such as such as water, electricity and natural gas.

Other factors that Georgia pacific could have also consider could be the availability of less expensive land with a bigger space as well as land with quality and efficiency facilities such as such as roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications. Also there other crucial factor that George pacific could

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consider could be the cost of transportation in terms moving the product as well as the supply cost. For example proximity to supplier can be excellent for JIT production as it improves performance of deliveries and reduces inventory as well as reducing cost.

Environmental consideration

In general environmental consideration is part of capacity planning and facility location. It was paramount that Georgia Pacific makes itself environmental friendly. Since Georgia pacific depends on timber as a natural resource, they need to assess location where environmental policies are either relax or less strict. For example Georgia Pacific had to buy the sawmill in Florida with strict environmental rules that makes it more difficult to build a new facility.

In order to reduce pollution caused by transportation Georgia pacific corp. have considered locating the material close to the site by expanding operation such as adding drying kilns, a planner mill for finishing and a warehouse for storing the finish lumber on site.

also choosing municipal sewage disposal system on site at skippers site, also the skipper was near an excellent timber base and a nearby resin plant that uses the residuals

Opinion on Georgia Pacific

It is believe that Georgia Pacific has made the correct capacity planning and facility location since all consideration were carefully analyses and decision made base on the out came. The main emphasis was the market condition

and the raw materials. The market condition was important because it focuses on the product demand, equally the availability and the location of raw materials so as to reduce the cost of transportation as well and meet the demand of the government or state environmental policy on industries all the factor discuss above were carefully consider by Georgia pacific corp. hence execute a well plan capacity planning and facility location.

Conclusion

In the case study it looks like at Georgia Pacific the emphasis is on growth, and so capacity increase and acquisition is a way of life.

It assesses possible increase of capacity by working as a team to solicit suggestion and obtaining information and use a check list for major factors such as deciding on market demand, technology equipment and labor. Also since the company depends on timber as a natural resource environmental consideration is equally important.

All of the above factors are very important part and parceled in decision making on capacity planning and facility location.

The factors listed on this report are very crucial when making capacity decisions. Capacity planning is a very important aspect in manufacturing companies, as it to do with meeting the customers demand. They also have a long term impact. Capacity also determines the selection of appropriate technology, type of labour and equipments. The right capacity ensures economically viable business