Planning and controlling the supply chain

Business

Four Primary Forecasting Techniques The primary forecasting techniques that Bronson Methodist Hospital uses varies with the ongoing processes of building, implementing, evaluating and the never-ending improvements that are made in each forecast models that are consistent throughout the organization.

Bronson hospital focuses on using forecasting techniques that have data that is readily available, can be performed in house, easy to understand and the forecasting methods are reasonable (Harrelson and McClurkan 2007).

Listed below are the four forecasting methods that are utilized within Bronson Methodist Hospital and will reflect how each of the elements is beneficial to the management of the organization (Harrelson and McClurkan 2007). Economical One of the most important parts of forecasting for Bronson hospital is the economical aspect especially with the economy struggling and companies attempting to meet the everyday demands of managing their bills (Harrelson and McClurkan 2007).

Bronson tends to focus on managing the provisions that are required for each unit and office by sustaining low costs for the supplies, by eliminating unnecessary waste from the kitchen and units, implementing menus that will stretch further for consumption and taking control of the portions that are served. Another method is keeping the energy costs low by turning off or down unnecessary usage of lights (Harrelson and McClurkan 2007).

Technology

Seasonal Trend Bronson measures some of their forecasting by seasonal trends that repeat themselves during a specific time frame. This type of forecasting is where procedures repeat itself over and over again in specific time frames such as a cycle of 12 months or in four quarters. There really is no set method that outshines another as it totally depends on the situation itself, the economy and the trends that are taking place at that given time. The key to forecasting is to be able to be flexible and adaptable to change at any given time. Production Plans

The production planning and master production schedules are not implemented at Bronson Methodist Hospital, as they would be in a manufacturing company.

However the planning as to how the hospital needs to be managed in terms of the budget is detailed as below (Harrelson and McClurkan 2007). Bronson Methodist Hospital basic criteria for their production is their vision, values and mission that they aim to implement each and every day through the three C’s which are the clinical excellence, customer and service excellence and the corporate effectiveness.

If one of these fails then the other two will fail as well (Harrelson and McClurkan 2007). Another part of their production plans is what the organization refers to as STEEEP, which is safe, timely, effective, efficient, equitable, patient ; family centered. The organization strives to maintain the mission to provide excellent healthcare services (Harrelson and McClurkan 2007). Workforce Size Bronson hospital employs approximately 3, 182

employees with a budget to work with which is approximately $751 million that includes the 85% inpatient and the 35% outpatient ratio.

To maintain the budget Bronson has the responsibility to ensure that there are enough employees to cover the demand needed for the care of the patients. This is why that there is a program that has been executed called the “ float pool” which gives Bronson the flexibility in having employees available at any given notice for working. This also gives jobs to people that are unemployed and looking for employment. Capacity Planning Capacity requirements planning (CRP) provide feasibility check of these schedules.

Capacity requirements planning matches planned production with actual capacity to ensure that schedules can be met; synchronous manufacturing paces the entire production process by the bottlenecks. Therefore, if additional or less capacity is needed, capacity is added or restricted at the bottlenecks.

In this way the flow is controlled at each bottleneck to bring the about the entire system the bottlenecks. In this way the flow is controlled at each bottleneck to bring the capacities in line. There are three initial portions of capacity planning and they are considered to be the productive, nonproductive and the idle.

Productive capacity is where products are being produced well; Non-productive capacity is where the products are not being produced at that specific time such as when maintenance is being performed. Idle capacity is where the product is not in demand such as when a contract is being disputed.

Bronson utilizes the capacity planning for the incoming and outgoing patients and the flow that needs to be maintained for quality service. Inventory Planning Bronson maintains a redundant process that is described as the one-plus-one plan, which makes sure that there are always equipment, supplies, food and tilities from vendors on a continuous basis as well as in an emergency situation. Budget Bronson’s budget is detailed and involved, as every aspect listed above has to be considered and acted upon carefully and consistently. In maintaining such an organization there are many different leaders in the management system that provides their own unique skills to bring together the circle that completes the criteria needed to be a Baldridge Award winner such as Bronson Methodist Hospital. MRP System MRP assumes WIP inventories and times the production of these inventories to coincide with the preplanned delivery dates.

The costs of inventories are computed based on carrying costs. Inventories are seen as necessary. MRP systems allow for economic order quantities, buffer stocks, and safety stocks. In MRP systems, inventories are pushed through the productive processes. Materials Requirements Planning (MRP) is implemented when there are various levels of production needed for a product.

This is where the data describing the product requirements, the structure of the production and the current inventories is implemented or planned accordingly for the completion of the project itself.

Materials Requirements Planning focuses on implementing the balance of capacity and producing a product within a 30-day window. The downside of

using the MRP system is that defects can occur anywhere and there is not a certain station that is held accountable for these defects. In MRP, production is scheduled based on lead-time requirements for a particular part of subassembly. Production dates for components are calculated based on lead times offset from delivery due dates.

Just-In-Time Just-in-time, on the other hand, sees inventories as wasteful.

Means are sought by which inventories can be reduced or eliminated. Constant attention is given to the reduction of unnecessary inventories. This creates a productive system where stability is important and quality must be assured. Synchronous manufacturing treats inventory as a loan given to the manufacturing unit.

Inventories are measured by raw materials cost. Buffer inventories are utilized to assure throughput. Overall, synchronous manufacturing discourages inventory if it serves no purpose. Inventory is measured in terms of dollar days with the goal of minimizing dollar days (Beasley n. d.

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In Just-in-time, production is controlled using a visual record. When work is completed at a various stations, conveyor belt is released and materials are transferred from the upstream station. Daily production schedules are determined based on a daily production quota. Smooth production schedules are sought to minimize disruptions to operations (Beasley n. d.

). Conclusion Bronson President, Frank Sardone states “ Bronson has been on a journey to excellence for many years, continuously raising the bar as we

benchmark our performance against best practice organizations in healthcare and in other industries.