

Managing operations: theory and practice

Business, Management



The paper “ The Critical Path Method, the Program Evaluation & Review Technique, and Other Managing Operations” is a wonderful example of a term paper on management. Management functions are those duties that are performed by managers. The main functions of a manager include organizing, planning, controlling, and leading. The management functions are mainly meant to provide significant information how the management process are taking place in an organization (Bateman & Zeithaml, 1993). Effective leadership and management usually involved creative problem solving whenever there are problems within organization and outside the organization that may affect the operations of the organization, for instance, the same qualities were displayed to bring back Nissan Motor Company Ltd. To effective operation after the March 11, 2011 Tsunami that swept across Japan. Other than restoring the operations of the company, the management ensured that employees to effective operations and workmanship. Other than its effective and elaborate risk management mechanisms, Nissan’s competitive advantage is within its decentralized supply chain structure with strong central coordination and control of its operations in cases of crisis. Additionally, the company has a flexible organization that makes it integrate vital and spontaneous changes(Bateman & Zeithaml, 1993). It should be noted that rigid organizational operations are usually disadvantageous to successes of organizations since such form of management will make change and reorganization of the operations of a company difficult in cases of crises. Therefore, Nissan employs this form of management in its central and international markets thereby making it stronger than its competitors at the national and international levels.

Toyota manufacturing strategies involves its productions both locally and internationally. This is different from Honda and Nissan that have only centralized their manufacturing operations. However, both Nissan and Honda have more international clients, that is, since the late 1970s, these two companies intensified their productions for export compared productions for national sales. Nonetheless, Toyota also did production for exportation but not at the same rate as the other two companies. Moreover, it is worth noting that all these companies manufacture different breed of vehicles targeting different customer with different needs and usage, as well as pocket level.

The CPM and PERT

The Critical path method (CPM) and the Program Evaluation & Review Technique (PERT) are project management techniques; however, they employ different principles in their operations at some particular stages. PERT requires breaking larger tasks into smaller timed tasks, but the smaller tasks must interconnect up to the main task. Therefore, the segmented time per tasks, when added, should be equivalent to the larger task (Toal et al., 1967). The paths of the unit tasks must follow each other without interruptions or delays since interruption or delay of a single unit task will lead to interruption of the main task. CPM is also divided into unit tasks; however, only the critical path is defined by duration in implementation, but just like PERT, interference with any path will lead to interference on the entire process. Therefore, for both PERT and CMP, everything must be completed with the schedule and with originally allocated resources.

For example, manufacturing a vehicle involves building several units that

would be brought and fixed together from the whole (Toal et al., 1967).

Hence, manufacturing each part must be timed so that the project is completed within a specific period; otherwise, delay in developing one part, for example, the doors will lead to the delay in assembling the entire vehicle.

PERT would largely favor the Manufacturing smaller parts of the vehicles than the larger parts that should only employ CMP. This is because the smaller parts are small to manufacture and pose minimal challenges unlike the larger parts like chassis that are complex and involving.

The steps used in forecasting systems often depend on a particular project. Nonetheless, the case companies will forecast their systems using the following major steps include determination of the forecast, selecting the forecast items, determining the forecast time horizon, and data collection (Mahadevan, 2009). Therefore, the most selling company will focus mainly on the determination of the forecasting systems.

Major Categories of Supply Chain Risk

The external risks – reduction mechanism is understanding the cause, nature, and extent of the risk, and use of related economy among others.

Internal risks – reduction process includes auditing, repair, changing personnel or the reporting structure, investing in planning and assessment, and advocating for proper communication among others.

A natural disaster is an environmental risk classified under external risks. A company can react to such risks by first understanding the magnitude of the damage thereby adjusting according to the magnitude of the damage (Mahadevan, 2009). For instance, response to the 2011 Tsunami could have involved stopping vital organizational operation then doing an audit to the

damage before reassembling the company for operation as before the disaster.