Theory of constraints

Business, Management



Theory of Constraints Topic: "Theory of Constraints (ToC)" to Service

Operations Country: UnitedStates

Delegate: Company Managers

(A) "Theory of Constraints" is a series of decision-making technique that was created by Dr. Goldratt around the 1980s, which tries to simplify the management and improvement of systems by identifying a few logical and physical constraining "leverage" points. Therefore, the theory can be regarded as a set of tools, which creates and implements a set of "levers" that synchronizes the parts of a system in order to obtain an array of magnitude improvements in the performance of the entire system (Steyn, 2002). The ToC has found a wide application in project management, production control, performance measurement, supply chain management, and other areas of business for non-profit like hospitals and military depots. However, it is important to note that the theory has specifically been widely applied in service units to identify bottlenecks in in the processes of production through its five-step process as outlined below:

Identification of the constraint,

Deciding on how to exploit the bottleneck/constraint,

Total application of resources to resolve the constraint,

Continuing to identify bottlenecks and

Resolve new constraints

(B) The United States is believed to be one of the countries of the world where the ToC has found wide application. Although much of this appraisal would be simulacrum of the real situation, there are a definable number of organizations, which uses ToC in the US. (B1) A number of them have uses

ToC in solving problems in their service operation units. For instance, ToC has led to processes improvement and proved to be a milestone concept in organizations like General Motors, Bethlehem Steel, National Semiconductor, Avery Dennison, Procter gamble, ITT, United Airlines, and the Boeing. In addition, the United States Air Force Logistics Command uses ToC to improve performance of their aircrafts repair depots on the other hand the United States Navy uses the concept in their Transport Corps.

- (C) The United States adopted the concept of ToC after a two-year quasi-experiment proved that the system could work even in more complex administrative environment. (C1)Therefore, it was theorized and empirically accepted that the concept of ToC would be even used beyond the manufacturing service centers. (C2)Managers thus, saw ToC as a vehicle for increasing performance through elimination of bottlenecks in the chains of production and hence started implementing the concept of ToC to boost their performance. Further, the managers realized that the concept of ToC challenged them to rethink about their fundamental assumptions of achieving their organizational goals and the purpose of cost management by laying emphasize on maximization of throughput-revenues generated through sales.
- (C4) The state also recognized that ToC had a number of benefits, which included potential for increased productivity with minimal operation process changes, the tool boosts teamwork through increased awareness of the bottleneck and the need to work together to overcome the constrained process. In addition, ToC is a cheap tool for increasing capacity of production, the tool is simple to apply and communicate, and finally it

provides a platform for evaluating the real value of changes thus, providing a basis for selecting the best options and decisions. Although there are setbacks of the ToC, the United States recognized that, the number of benefits derived from using ToC was much more than the setbacks. This being said, the United States pushes for applicability of ToC to service centers.

References

Steyn, H. (2002). Project management applications of the theory of constraints beyond critical chain scheduling. International Journal of Project Management, 20(1).