

Chapter VI

Technology Management by Objectives

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ABSTRACT

This chapter introduces the concept of technology management by objectives. Technology is one of the fastest moving elements in the 21st Century, which could be well explained using the growth theory. The growth theory is defined on the basis of the economic growth from the increasing returns that is associated with the new knowledge. The knowledge has various dimensions in today's world, one of which is the technology. The major portion of any improvement or any development in any sector is due to technology or due to a change in technology. Technology in any organization can improve, sustain, and diminish the business based on the approaches used in the model. The ability to connect technology and gain organization advantage depends upon how efficiently and effectively the technology is managed within the organization. Technology has been managed by different means based on the application of the technology. This chapter would discuss how the technology could be management by objectives (TBO). Many approaches have been utilized to integrate individual and team goal with the overall goals of the organization of an enterprise. Each group goal would have a set of objectives and satisfying all these objectives is virtually impossible because many of them contradict to each others. Technology by objectives is a process in which the common goals are identified and would define individually the major area of responsibility in terms of the results and objectives expected in detail. The goals would be jointly established by the administrators and the sub-ordinates and would emphasis on the output variables. Every corporation has different technological goals and visions, so based on the enterprise the goals and objectives are set.

INTRODUCTION

This chapter on technology management by objectives would discuss about the definition and concepts of technology management by objectives. The need and requirements of the TMO is also discussed. Technology management by objectives can be set in all different domains of activities with in organization, right from research, production, sales, service, logistics, human resource, finance, information system etc. Some of the objectives are collective, for the whole enterprise which are called as Global TMO and those objectives that are localized with in the department are called as Local TMO. The objectives for the TMO must be specific, measurable, achievable, relevant, time specific, extendable, and recordable. The objectives for the TMO usually needs quantifying and monitoring which is usually does using a reliable management information system (MIS) that are needed to establish relevant objective and monitor them thorough out the life cycle. MIS is a subset of the overall internal control of a business covering all the aspects of a business there by helping the TMO to reach its goals (Castellano, J. F., Rosenzweig, K., & Harper, A. R., 2004).

TMO is an innovative way to reach the goals but there are limitations with TMO, the use of TMO needs to be carefully aligned with the culture of the organization. While TMO is not as fashionable as it was pre determined, it still has its place in management today. The key difference is that rather than 'set' objectives from a cascade process, objectives are discussed and agreed, based upon a more strategic picture being available to employees. Engagement of employees in the objective setting process is seen as a strategic advantage by many (Handy Understanding Organizations). Another more fundamental and authoritative critique comes from Walter A. Shewhart / W. Edwards Deming, the fathers of Modern Quality Management, for whom TMO is the opposite of their founding Philosophy of Statistical Process Control. TMO aims in increas-

ing the technological performance by aligning the goals and objectives of the enterprise as well as the goals and objectives of the employees thorough out the enterprise. Ideally the employees identify and understand their objectives, the duration to complete the objective, they are also evaluated during different interval of time and finally they get the tracked feedback in the process to reach the objectives. TMO is very similar concept to the Management by Objectives which was first out lines by Peter Drucker in 1954 in his book '*The Practice of Management*'. In the 90s, Peter Drucker himself decreased the significance of this organization management method, when he said: "It's just another tool. It is not the great cure for management inefficiency... Management by Objectives works if you know the objectives, 90% of the time you don't."

DEFINITION AND CONCEPT

There had been many approaches that have been utilized to integrate individual and team goals with overall goals of the organization of an enterprise. Technology management by objectives is basically a strategic process in which the group that works on an objective have a:

- Understand to have a common goal; especially all the members in the group should understand the importance in a big picture.
- Identify the responsibility for each team member in the enterprise, this is also really important because each team member needs to understand how their work would affect the other technology development related to it.
- Use these measures as guides for operating the technology enterprise and accessing the contribution of the team
 - The goals are usually established as a team that work in the in technology

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