Chapter 5.1
Optimization of Enterprise Information System through a 'User Involvement Framework in Learning Organizations'

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ABSTRACT

Enterprise resource planning (ERP) today is being adopted by business organizations worldwide with a view to maximize their capabilities. But more often than not the expected outcomes are not delivered due to inaccurate calculations with respect to the organization's ability to adapt to the change. Although the benefits of enterprise information systems in streamlining the functions of the organization cannot be questioned, preparing the organization to adopt the new system needs more focused efforts. In order to ensure that the existing capabilities of the organizations are an enabler and not an inhibitor in the adoption process, they need to be learning organizations. A study was conducted in Bhilai Steel Plant (BSP), one of the leading steel manufacturing public companies in India, where ERP is to be adopted. In spite of the fact that it has a strong backbone of resources in terms of information technology (IT) infrastructure, the implementation process is virtually on a standstill. In this chapter, an evaluation of the psychological capabilities of the organization is done. This can be evaluated through the mindset of the workforce and the willingness with which they are ready to adopt change.

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INTRODUCTION

Information Technology

Information Technology is the key driver for change and is instrumental in the creation of lean organizations where technology fully supports the implemen-

tation of quality enhancement techniques to meet the growing demands of competition. Moreover the competitive pressures and escalating maintenance costs is pressuring organizations to replace the legacy system of operations. The envisioned benefits of IT enabled change is the enhancement of competitive ability through the networking of geographically distant work groups and a more effective utilization of man, material and machine.

While evaluating the benefits of enterprise information systems, the explicit outcome is change in the organization's system as a whole to implement the new practices and processes and ideas. With the introduction of a knowledge base, the challenge for the organization gets magnified as the perceived flexibility when evaluated in physical terms may be accurate but may fall short in meeting the much needed psychological flexibility. Hence, ERP and other forms of IT enabled solutions, which are being widely adopted with a view to maximize capabilities, are not able to deliver the expected outcomes due to such inaccurate calculations.

The implementation of any IT enabled operations systems requires a systematic approach which includes the evaluation of the organization's learning capabilities. Hammer and Champy (1993) focused on IT based organizational reengineering. Their vision can be summarized along the following points.

1. Radical transformation: It is time consuming and does not happen overnight.
2. Changes come from a clean slate through the conceptualization of gradual work arrangements unlike total quality management.
3. The focus of change should be process based.
4. The change needs to be initiated at the top and then directed downwards throughout the organization. and
5. Seamless access to information to one and all.

Hence, in order to ensure that the IT enabled change acts as an enabler of growth, it becomes necessary to evaluate the firm's learning capabilities. Organizational learning takes place when successful organization learning is transferred to an organization's shared beliefs. Learning is the key competency required by any organization that wants to survive and thrive in the new knowledge economy. As organizations grow old though they accumulate competencies, resources and knowledge, there is a possibility that their structures become a hindrance to their ability to respond to the challenges posed by the competition. A constructivist-learning environment is a place where people can draw upon resources to make sense out of things and construct meaningful solutions to problems. It emphasizes the importance of meaningful, authentic activities that help the learner to construct understandings and develop skills relevant for solving problems.

"Make learning part of every day office environment" is the mantra to survive in this competitive world. The Learning Organization is one that learns continuously and transforms itself. Learning takes place in individuals, teams, the organizations, and even the communities with which the organizations interact. Learning results in changes in knowledge, beliefs, and behaviors. Learning also enhances organizational capacity for innovation and growth. The Learning Organization has embedded systems or mechanisms to capture and share learning. Thus organizational learning is an important part of **Organizational Transformation process**.

Enterprise Information System

An Enterprise Information System (EIS) is a type of management information system made to facilitate and support the information and decision making needs of senior executives by providing easy access to both internal and external information relevant to meeting the strategic goals, of the