ABSTRACT

Enterprise Information systems implementation is one of the most challenging parts of IT strategy for an organization, since implementation brings in efficiency in the system and justifies the investments made. Therefore, it becomes increasingly important to study the perspectives of implementation to understand the current dynamics. The purpose of this paper is twofold, first is to explore the type of literature that exists in information system implementation and secondly to determine the research methodologies incorporated therein for the information system field’s implementation in specific. The basic content analysis is done to review the articles on information system implementation. A total of 47 articles were selected from peer reviewed journals and conferences. The study was conducted to assess the methodology used, the strategies followed along with the issues and challenges faced in the implementation. It presents an arena of the studies done in information system implementation in the past 20 years (typically 1993 to 2013). The IMPLEMENT framework has been proposed to synthesize the literature finding for smooth functioning of IS implementation process. This study would encourage the practitioners in the information systems domain to improve upon their organizational capability and incorporate other best practices.

Keywords: Critical Success Factors, Implement Framework, Information Systems, Information System Implementation, Information System Strategy, Management Support, Project Management
INTRODUCTION

Information system implementation involves the design of the framework and model, the management’s role and strategies. The user’s involvement in information system implementation has been one of the critical aspects of information system since; it can point us to where the system can fail. Top management and training are the two most important organizational factors that are known to affect information system implementation (Hwang, Lin & Lin, 2012).

Information system implementation has been a pioneer study in the field of information systems. There has been literature on the debate between the technical aspects vis-à-vis human behavioural aspects. Some authors (Keen & Scott-Morton, 1978) mention that implementation is an intuitive skill and the best way to deal with implementation is to be technically competent. Whereas others (Hirschheim, 1985; Friedman & Cornford, 1989) mention that implementation depends on user involvement, how the prototyping is done, the information analysis done and the change agents. Implementation stage is one of the most risky stages of the information systems lifecycle. There is resistance from users and hence the role of the team and the management becomes extremely important.

Some models that define IT implementation is diffusion models (Cooper & Zmud, 1990) which states that in a user community, it’s an organizational effect that works towards diffusing the appropriate information technology. The other model is the Lewinian model which discusses implementation as a process of innovation and implementation brings in change for which unfreeze and freeze models would work to an extent. Pinto and Millet (1999), mention that human processes and behavioural components are important for success of information systems. They also mention that how project prioritization, communication among people and techniques for planning and scheduling can help in dealing with the change control pressures and also deal with the system development lifecycle politics. Cross functional teams are the key according to them.

The previous studies included situational normativism philosophy (Shakun, 1975), process theory of implementation (Zand & Sorensen, 1975), theory based on user influence (Lucas, 1974), theory of implementation (Debrabander & Edstrom, 1977) and documentation as a success factor (Neal & Radnor, 1973). Some other studies are the paradigm of organization information system (Van Gigch & Le Moigne, 1990), idealized design methodology (R.L. Ackoff, 1981) and systematic enterprise theory (Eriksson, 2004). Kolb Frohman model of information system implementation was widely used in the seventies. It facilitated budget making process of the government.

This study lays its focus on core information systems implementation. Overall a diverse view is adopted by the researchers over the period of years. The earlier studies focused on the social technical aspect and organization bit as a whole, whereas, the dynamism of the environment is taken care in the recent studies.

OBJECTIVES OF THE STUDY

The major objectives of this study are:

1. To study the literature of the information system implementation and understand the main perspectives and findings by them;
2. To understand the research methodologies used by authors and understand what kind of research has been appreciated the most;
3. To understand what shape the future research can take from the existing research.

RESEARCH METHODOLOGY

A simple content analysis was conducted on research articles and articles in international journals. Search was conducted using the search databases, Proquest, EBSCO, Emerald, INFORMS, JSTOR, IGI GLOBAL for finding articles on information systems implementation.
Related Content

Towards a Model-Centric Approach for Developing Enterprise Information Systems
www.irma-international.org/chapter/towards-model-centric-approach-developing/48574/

Size Matters! Enterprise System Success in Medium and Large Organizations
www.irma-international.org/chapter/size-matters-enterprise-system-success/20283/

A Methodology for the Auditing of Technological Knowledge Management
www.irma-international.org/chapter/methodology-auditing-technological-knowledge-management/37912/

Integration Concept for Knowledge Processes, Methods, and Software for SMEs
www.irma-international.org/chapter/integration-concept-knowledge-processes-methods/20281/
Green Business Practices for Software Development Companies: An Explorative Text Analysis of Business Sustainability Reports
www.irma-international.org/article/green-business-practices-for-software-development-companies/138829/