

EVALUATION OF ERP EFFECTIVENESS IN INDIAN CONTEXT: AN EMPIRICAL STUDY

By

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Submitted

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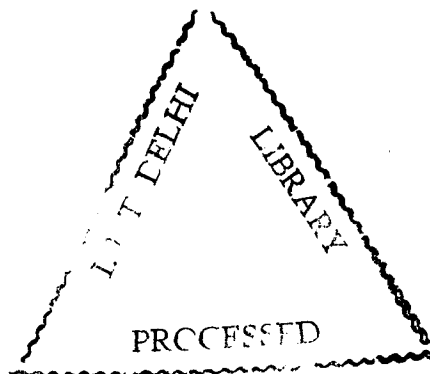
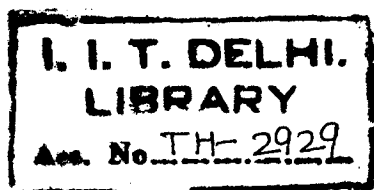
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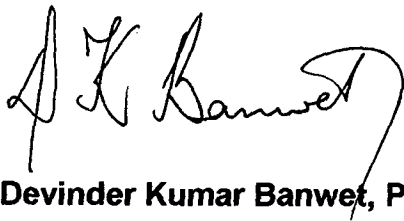
business forecasting

RP (Enterprise Resource planning)



CERTIFICATE

The thesis entitled “**Evaluation of ERP Effectiveness in Indian Context: An Empirical Study**”, being submitted by Mr. Vineet Kansal to the Indian Institute of Technology, Delhi, for the award of degree of Doctor of Philosophy, is a record of bonafide research carried out by him. He has worked under my guidance and supervision and has fulfilled all the requirements for the submission of thesis, which has attained the standard required for a Ph.D. degree of the Institute. The accompanying thesis is his genuine and original work and the results presented in the thesis have not been submitted elsewhere for the award of any degree or diploma.



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EVALUATION OF ERP EFFECTIVENESS IN INDIAN CONTEXT: AN EMPIRICAL STUDY

ABSTRACT

A range of influences, both technical and organizational, has encouraged the wide spread adoption of ERP systems. Nevertheless, there is a growing consensus that ERP systems have in many cases failed to provide expected benefits. The increasing role of, and dependency on ERP (and 'IT' in general), and the 'uncertainty' of these large investment, have created a strong need to monitor and evaluate ERP effectiveness. After the study of existing body of knowledge the macro and micro variables affecting ERP effectiveness have been identified. Both quantitative and qualitative techniques are used to carryout this study. The questionnaire survey and interviews of executives related to ERP project are used for the collection of relevant data. The data was collected from organizations operating in India. The empirical statistical analysis of the data was completed using SPSS tool. The quantitative data have been analyzed with descriptive and inferential statistics analysis. Qualitative data were used for Interpretive Structural Modeling (ISM) whereas case studies of select Indian organizations were analyzed using SAP – LAP methodology. This soft system technique is systematic and innovative having a holistic approach. On the basis of the findings, a model for increasing ERP effectiveness is proposed. The results indicate that integrative nature of ERP system. The interaction among intra-organizational and inter-organizational users is a network of complex socio-technical system wherein a large percentage of costs and benefits are either somewhat hidden or they emerge after ERP implementation, induced by the organization's attempt to retain its competitive advantage by utilizing and extending core ERP functionality. Senior management has the responsibility to understand the dynamics and the integrative, permanent and strategic nature of ERP as well as prevailing competitive conditions in the global market place throughout the life cycle of ERP systems.

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