



ORIGINAL RESEARCH PAPER

A STUDY PAPER ON SCM IN ERP WITH SPECIAL REFERENCES TO SELECTED ENGINEERING COMPANIES IN GUJARAT

Management

KEY WORDS: SCM, ERP, Pearson Correlations, IQ, SU, A and SCMBF

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ABSTRACT

The aim of this investigation is to identify the essential components of SCM-ERP integration and how it deals with HR concerns. SCM: The Business Focus factor and information quality of ERP solution, system quality of ERP solution, system use of ERP solution and appropriateness of ERP solutions in context to engineering companies of Gujarat State. The total SCM-ERP integration oriented engineering companies are 143 in Gujarat. The selection of 15 companies is made possible on the basis of five zones of Gujarat State. The source of data is primary and secondary. The primary data are collected through structured questionnaire administered to the respondents in person and through email, Pearson correlations is conducted as statistical tests for achieving the objectives.

Introduction

Enterprise Resource Planning is business management software, typically a suite of integrated applications—that a company can use to collect, store, manage and interpret data from many business activities, including: product planning, cost. Manufacturing or service delivery, marketing and sales. This phenomenon in software industry is inevitable in business world in 21st century. The integration of ERP with Supply Chain Management gives better firm performance and smooth management practices. Most of the organizations either SMEs or large scale companies have integration interfaces between ERP and SCM systems for the exchange of customer and sales data. In recent years there has been a blurring of the distinctions between ERP and SCM systems. Most ERP systems have expanded to also include basic functionality for SCM and Management Information Systems (MIS). Similarly, SCM systems now include much general ERP functionality. The aims of this investigation to identify the essential components of Supply chain Information System and their relations with SCM: The business focus in context to selected engineering companies of Gujarat State.

Review of Literature

Remaining Work

SIGNIFICANCE OF THE STUDY

The study contributes to the knowledge of the researchers as well as provides much-needed details to the software designers. The findings of the present study would be of use to large and small manufacturers about the conception and perception about various software.

Research Objectives

1. To examine the relationship between SCM: The Business Focus factor and information quality of ERP solution in context to engineering companies of Gujarat State.
2. To examine the relationship between SCM: The Business Focus factor and system quality of ERP solution in context to engineering companies of Gujarat State.
3. To study the relationship between SCM: The Business Focus factor and system use of ERP solution in context to engineering companies of Gujarat State.
4. To study the relationship between SCM: The Business Focus factor and appropriateness of ERP solution in context to engineering companies of Gujarat State.

Analysis

Pearson Correlation Test

In this study, Pearson correlation test is conducted to determine the relationship amongst the factors i.e. IQ, SU, A and SCMBF.

Correlations

		IQ	SQ	SU	A	SCMBF
IQ	Pearson Correlation	1	.618**	.735**	.678**	.612**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	372	372	372	372	372
SQ	Pearson Correlation	.618*	1	.654**	.669**	.650**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	372	372	372	371	372

SU	Pearson Correlation	.735**	.654**	1	.650**	.608*
	Sig. (2-tailed)	.000	.000		.000	.000
	N	372	372	372	371	372
A	Pearson Correlation	.678**	.769**	.650**	1	.709**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	371	371	371	371	371
SCMBF	Pearson Correlation	.612**	.669**	.608*	.709**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	372	372	372	371	372

** . Correlation is significant at the 0.01 level (2-tailed).

Finding

This study provides outcomes on SCM-ERP integration with special reference to engineering companies of Gujarat State. This study provides insights on employee perception towards SCM activities by focusing on firm business and core components of ERP software in terms of information quality, system quality, system use and appropriateness. The motivational factor of this investigation is to understand digital world in engineering companies which either SMEs or non-corporate organizations in state of Gujarat. The relation between employee perception and effects on firm performance on implementing integration of SCM-ERP will provide directions to employers for better outcomes on productivity.

Recommendations

1. Employees of engineering companies should focus on up gradation of employee technological knowledge through on the job or off the job training.
2. ERP-SCM integration usage should be made more popular amongst the employees of engineering SMEs with a view to improve interdepartmental communication by enabling disparate departments to collaborate more easily.
3. ERP-SCM integration usage should be made more popular amongst the employees of engineering SMEs with a view to drive profitability in a better manner.
4. ERP-SCM integration usage should be made more popular amongst the employees of engineering SMEs with a view to become more customer focused.
5. ERP-SCM integration usage should be made more popular amongst the employees of engineering SMEs with a view to make more informed business decisions.
6. ERP-SCM integration usage should be made more popular amongst the employees of engineering SMEs with a view to take a business process view.
7. The engineering SME employers should take measures on determining how ERP-SCM integration can benefit to the end users.

Conclusion

SCM: The Business Focus (SCMBF) factor is observed as significantly correlated with information quality (IQ) It can be concluded that respondents are more conscious on their job execution through ERP –SCM integration in terms of information accuracy, information preciseness, information completeness, information timeliness, Information compatibility, Information

understandability, Information volume appropriateness and Information relevancy, collaborative customer relationship, customer problem solution, right choice of customer and installation process of SCM.

SCM: The Business Focus (SCMBF) factor is observed as significantly correlated with system quality (SQ) It can be concluded that respondents are more conscious on their job execution through ERP –SCM integration in terms of, limitations of unauthorized access Ease of system use in ERP, integrated reports, easy navigation to information appropriate style of design for business., transaction security and error free transaction are ,right choice of customer and installation process of SCM.

SCM: The Business Focus (SCMBF) factor is observed as significantly correlated with system quality (SU) It can be concluded that respondents are more conscious on their job execution through ERP –SCM integration in terms of, Job performance improvement, goal achievement, flexible interaction clear and under stable interaction, productivity improvement, technical soundness, easy to access, usage reduces human power in organization, improvement in data control and informational decisions are ,right choice of customer and installation process of SCM, the best customization, time saving, and improving customer services

SCM: The Business Focus (SCMBF) factor is observed as significantly correlated with appropriateness (A) It can be concluded that respondents are more conscious on their job execution through ERP –SCM integration in terms of, improving absenteeism management, improving training and development functions, improving reward management, improves profit ratio and improving data input process, are right choice of customer and installation process of SCM, the best customization, time saving, and improving customer services.

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