ADAPTABILITY OF VOICE OVER IP (VoIP) TECHNOLOGIES IN SRI LANKAN ENTERPRISES

MASTER OF BUSINESS ADMINSTRATION IN



Electronic Theses & Dissertations www.lib.mrt.ac.lk

C. L. L. Bandara

Department of Computer Science & Engineering

University of Moratuwa

December 2004

ADAPTABILITY OF VOICE OVER IP (VoIP) TECHNOLOGIES IN SRI LANKAN ENTERPRISES

By

C. L. L. Bandara

The Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirements for the Degree of Master of Business Administration in Information Technology.

Department of Computer Science & Engineering
University of Moratuwa
December 2004

DECLARATION

I hereby certify that this research report and all the articles associated with this are my own and it had not been submitted before nor is currently been submitted for any other degree program. Wherever materials from other resources have been used, due recognition has been given by acknowledging the source.

Name of the student: Chaminda Lakdeep Lewke Bandara
Signature:
Date :
Name of the Supervisor: Mr. Kithsiri Samarasinghe sertations www.lib.mrt.ac.lk
Signature:
Date :

ACKNOWLEDGMENT

This Research report is a requirement to complete the module PIE 501- Research Project in my course of study for the Master of Business Administration in Information Technology.

The study was done under the supervision of Mr. Kithsiri Samarasinghe. I take this opportunity to express my grateful thanks to Mr. Samarasinghe for the continuous guidance, direction and encouragement given to me, throughout my Research study. Further I am thankful to the Head of the Departments of Computer Science and Engineering and Management of Technology and the entire academic staff, as I consider this report is a result of the education received since the commencement of my studies at the University of Moratuwa, Sri Lanka.

University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations

I would also like to express my gratitude to all the respondents for providing necessary data for my research study. Finally I would like to thank my family and friends who helped me in many ways during the research.

ABSTRACT

With the emergence of converged technologies many companies have looked to make use of these technological advancement for the betterment of their business operations. The aim of this research is to empirically study the adaptability of VoIP technologies for Sri Lankan enterprises. The study attempt to identify the main factors, which influence the benefits of VoIP technologies. It also tries to analyze how different parameters of the above factors contribute towards the perceived benefits of VOIP technologies The research model developed by Udo and Davis (1992) for his analysis of "Factors affecting decision support system benefit" was used in this analysis. The study shows that mainly Industrial, Organizational, Technological and User factors affect the benefits of the VoIP technologies and hence the adaptability of the same for Sri Lankan enterprises. Also the study has identified how some the parameters of the above main factors affect the benefits of VoIP.

www.lib.mrt.ac.lk

List of Tables

Number	Title	Page
5.1	Significance of predictors direct benefits in the presence of other variables	22
5.2	Significance of predictors indirect benefits in the presence of other variables	23
5.3	Association of predictor variables with direct benefits – Regression coefficients of significant variables	24
5.4	Association of predictor variables with indirect benefits – Regression coefficients of significant variables	25



University of Moratuwa, Sri Lanka Electronic Theses & Dissertations www.lib.mrt.ac.lk

Number	Title	Page
3.1	Research Model	16

CONTENTS

Chapter		Page
1.	INTRODUCTION	1
	Justification of Study	2
	Objectives Significance	2
	Significance Scope	2 3
	•	
2.	LITERATURE REVIEW	4
	Motives for adapting Voice over IP technologies	4
	Main issues to consider when implementing VoIP	5
	Direct and Indirect Benefits of VoIP implementations	12
3.	RESEARCH MODEL	16
	Conceptualization	17
	Operationlization versity of Moratuwa, Sri Lan	
	Electronic Theses & Dissertation	
4.	RESEARCH METHODOLOGY	21
	Sample and Data Collection Limitations	21 22
	Limitations	22
5.	DATA ANALYSIS	23
6.	ANALYSIS AND DISCUSSION OF RESULTS	27
7.	CONCLUSIONS AND RECOMMENDATIONS	29
Ap	pendix A – Research Questionnaire	
Ap	pendix B – Typical VoIP implementations	

REFERENCES