VOIP/IP TELEPHONY: A FINANCIAL ANALYSIS FOR DIFFERENT BUSINESS SECTORS IN SRI LANAKA

MASTER OF BUSINESS ADMINISTRATION

IN

INFORMATION TECHNOLOGY

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December 2006.

VOIP/IP TELEPHONY: A FINANCIAL ANALYSIS FOR DIFFERENT BUSINESS SECTORS IN SRI LANAKA

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The dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration.

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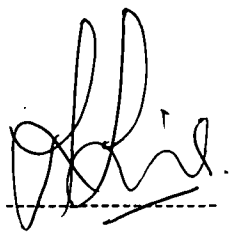
December 2006.

Declaration

This is to certify that the work included in this dissertation, in part or whole was not submitted to any Academic institution for any other academic qualification.



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UOM Verified Signature

Dr. Gihan Dias.
(Supervisor)

Acknowledgements

This research study was carried out as part of the MBA in IT program conducted by the University of Moratuwa. First and foremost, I would like to thank Dr. Gihan Dias who supervised this research, for giving valuable guidance and advice to carrying out the research activities effectively. I also like to thank all the staff members of Computer Science and Engineering Department and the Management of Technology Department of University of Moratuwa for their assistance.

All the IT Folks belonging to the Companies that have been taken as Case Studies in this thesis deserve special thanks for providing valuable information about the existing details pertaining to Voice & Data Communication, their experiences during implementation of the projects & sharing with me the frank feedback they got from the end-users of the systems they implemented.

Finally I would like to thank all family members and my friends, for assisting in many ways to complete this research.

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Acronyms

ATA	Analog Telephony Adaptor
CFO	Chief Financial Officer
CIO	Chief Information Officer
CO	Central Office
CTO	Chief Technology Officer
DSP	Digital Signal Processor
ERP	Enterprise Resource Planning
FDDI	Fiber Distributed Data Interface
ICT	Information and Communication Technology
IP	Internet Protocol
IRR	Internal Rate of Return
ISDN	Integrated Services Digital Network
LAN	Local Area Network
MACs	Moves Adds & Changes
NPV	Net Present Value
OS	Operating System
PBX	Private Branch Exchange
PC	Personal Computer
POE	Power Over Ethernet
PRI	Primary Rate Interface
PSTN	Public Switched Telephony Network
ROI	Return On Investment
SBU	Strategic Business Units
SI	Systems Integrator
SP	Service Provider
TCO	Total Cost of Ownership
TDM	Time Division Multiplexed
VG	Voice Gateway
VOIP	Voice over Internet Protocol
VPN	Virtual Private Network
WAN	Wide Area Network

Abstract

This research study was carried out as part of the MBA in IT program conducted by the University of Moratuwa. This is an exploratory type of research carried out to analyze the financial aspect of IP telephony & Voice over Internet Protocol (VoIP) for different Business Sectors in Sri Lanka. The analysis was carried out in Case Study style for selected companies. Companies were selected based on a specific criteria/scope & so once it falls in to these criteria the ease of collecting information for a comprehensive analysis was taken into consideration as well since a whole heap of information is required for a more realistic calculation.

Currently, it is not possible to find a document on Return on Investment (ROI) or Financial Calculations for these types of projects in Sri Lanka. This is mainly due to the fact that this is a relatively new technology & the secondly due to lack of information to carry out such a task. In North America & Europe independent research organizations carry out such research on various technologies no sooner the technologies come into the limelight. In developing countries like Sri Lanka such independent research organizations are almost non-existent primarily because this is relatively small market in a third world country. Yet Sri Lanka has world class industries in Garment, Tea & other sectors in Manufacturing, Hospitality, and Information Technology and so on. Financial Sector is facing heavy competition from foreign based banking giants like HSBC, Citibank, Deutsche Bank, ICICI bank etc. Same goes to many other business sectors. Hence in order to compete in an open, global economy, any company requires ammunition. Ammunition to lower their costs, differentiate, provide a focused service. Information Technology is one area that many companies turn to obtain ammunition in this regard. Communication is one area almost every company cannot live without. Hence this type of a study would hopefully benefit the Sri Lankan Businesses and other sectors.