

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

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By

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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.

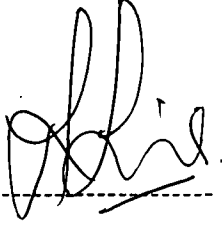
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Declaration

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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(Supervisor)



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Contents

	Page
List of Tables	7
List of Figures	8
Appendices	9
Acronyms	10
Abstract	11
1 INTRODUCTION	12
1.1 Background.....	12
1.2 Local Significance of this study	15
1.3 Statement of Problem	15
1.4 Existing research on related topic.....	16
1.5 Research Objectives.....	16
1.6 Importance of the study	17
1.7 Scope.....	17
1.8 Methodology.....	18
1.9 Organization of the study.....	20
1.10 Limitations of the study	21
2 LITERATURE ON VOIP AND IP TELEPHONY	22
2.1 What is VoIP?.....	22
2.2 What exactly is Internet telephony?	22
2.3 What exactly is IP Telephony?.....	23
2.4 End devices used in IP Telephony/VoIP	24
2.5 Views of IP Telephony advocates	27

2.6	Views of Advocates for Traditional system	29
3	DETAILS ON THE METHODOLOGY	31
3.1	Financial Performance Indicators	31
3.2	Assumptions on Financial Indicators.....	32
3.3	Voice Communication scenarios	32
3.4	Summary of Methodology	34
4	FINANCIAL ANALYSIS FOR DIFERENT BUSINESS SECTORS	35
4.1	Financial Sector- Case A	35
4.2	Financial Sector- Case B	43
4.3	IT Sector	51
4.4	Non-Government Sector.....	60
4.5	Manufacturing Sector	67
4.6	Transport Sector.....	73
5	SUMMARY AND CONCLUSIONS	80
5.1	Summary	80
5.2	Findings and Conclusions.....	81
5.3	Implications and recommendations	83
5.4	Agenda for further study.....	84

References 85

Appendix 87

List of Tables

Table 1 A: Operationalisation of variables.....	19
Table 4.1 A: Legacy PBX Financial Analysis for Financial Sector –Case A.....	36
Table 4.1 B: IP enabled PBX Financial Analysis for Financial Sector –Case A.....	38
Table 4.1 C: IP Telephony Financial Analysis for Financial Sector –Case A.....	40
Table 4.1 D: Summary of Analysis for Financial Sector –Case A.....	41
Table 4.1 E: Soft Befits in tangible terms.....	42
Table 4.2 A: Legacy PBX Financial Analysis for Financial Sector –Case B.....	43
Table 4.2 B: IP enabled PBX Financial Analysis for Financial Sector –Case B.....	46
Table 4.2 C: IP Telephony Financial Analysis for Financial Sector –Case B.....	48
Table 4.2 D: Summary of Analysis for Financial Sector –Case B.....	49
Table 4.2 E: Soft Befits in tangible terms.....	50
Table 4.3 A: Legacy PBX Financial Analysis for IT Sector Case Study.....	52
Table 4.3 B: IP enabled PBX Financial Analysis for IT Sector Case Study.....	54
Table 4.3 C: IP Telephony Financial Analysis for IT Sector Case Study.....	56
Table 4.3 D: Summary of Analysis for IT Sector Case Study.....	58
Table 4.3 E: Soft Befits in tangible terms.....	59
Table 4.4 A: Legacy PBX Financial Analysis for Non-Governmental Sector Case Study.....	61
Table 4.4 B: IP enabled PBX Financial Analysis for Non-Governmental Sector Case Study.....	62
Table 4.4 C: IP Telephony Financial Analysis for Non-Governmental Sector Case Study.....	64
Table 4.4 D: Summary of Analysis for Non-Governmental Sector Case Study.....	65
Table 4.5 A: IP enabled PBX Financial Analysis for Manufacturing Sector Case Study.....	68
Table 4.5 B: IP Telephony Financial Analysis for Manufacturing Sector Case Study.....	70
Table 4.5 C: Summary of Analysis for Manufacturing Sector Case Study.....	71
Table 4.5 D: Soft Befits in tangible terms.....	72
Table 4.6 A: Legacy PBX Financial Analysis for Transport Sector Case Study.....	74

Table 4.6 B: IP enabled PBX Financial Analysis for Transport Sector Case Study.	76
Table 4.6 C: IP Telephony Financial Analysis for Transport Sector Case Study....	78
Table 4.6 D: Summary of Analysis for Transport Sector Case Study.....	79
Table App-A: Template for calculation of financial benefits.....	87
Table App-B: Soft Befits in tangible terms; a sample calculation.....	89

List of Figures

Figure 1-A : Traditional Communication Network Infrastructure.....	13
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Appendices

	Page	
A	Template for calculation of the Financial Benefits	86
B	Template for calculation of the Soft-Benefits	87
C	Questionnaire sent to the each company	89



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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.