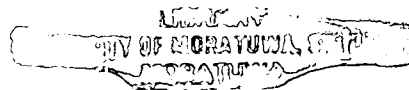


THE VIABILITY OF TELEWORK IN SRI LANKA
(based on a study carried out in the Western Province)



MASTER OF BUSINESS ADMINISTRATION
IN
INFORMATION TECHNOLOGY

Y. B. Wickremasinghe
Department of Computer Science and Engineering
University of Moratuwa
December 2005

004 "05"
004:65(043)

University of Moratuwa



86335

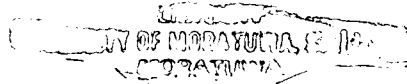
86335

86335

THE VIABILITY OF TELEWORK IN SRI LANKA
(based on a study carried out in the Western Province)

By

Y. B. Wickremasinghe



This 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.

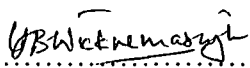
Department of Computer Science and Engineering
University of Moratuwa
December 2005

Name : Y. B. Wickremasinghe
Student Registration No. : 03/9093
Supervisor : Dr Chathura De Silva

This dissertation was submitted to the Department of Computer Science and Engineering of the University of Moratuwa in partial fulfillment of the requirements for the degree of MBA in Information Technology.

The work included in this dissertation in part or whole, has not been submitted for any other academic qualification at any institution.

I certify that I have not plagiarized the work of others or participated in unauthorised collusion when preparing this document.


.....
Y. B. Wickremasinghe

19/1/06
.....
Date

Supervisor


.....
Dr. Chathura De Silva

19/01/06
.....
Date



Acknowledgements

I would like to thank Dr. Chathura De Silva for guiding me throughout my work in carrying out this research project and in the compilation of this dissertation. I would also like to thank all those who helped by participating in the surveys carried out.

Table of Contents

Declaration.....	i
Acknowledgements.....	ii
Executive Summary	vi
1. Introduction	1
1.1 Problem Statement.....	1
1.2 What is Telework?.....	3
2. Goals and Objectives	5
2.1 Research Questions.....	5
2.2 Research Objectives.....	5
3. Literature Review.....	6
4. Importance of Study.....	10
4.1 Benefits	10
4.2 Timing.....	11
4.3 Trends toward Teleworking.....	12
5. Research Design.....	14
5.1 Identifying Critical Success Factors	14
5.2 Questionnaire Design.....	17
6. Survey Methodology.....	19
6.1 Sample Criteria	19
6.2 Proposed Sample space.....	19
6.3 Data Collection Method.....	20
6.4 Sampling Method.....	21
6.5 Hypotheses.....	21
6.6. Project Schedule.....	21
7. Current Status in Sri Lanka.....	23
8. Data Analysis & Discussion – Potential Telework Employee.....	27
8.1. Like to Telework?	27
8.2 Disciplined to Telework ?.....	27
8.3 Having Needed Equipment to Telework.....	28
8.4 Use Telework if Paid / Not Paid by Employee.....	29
8.5 Potential Telework Frequency	30
8.6 Nature of respondents	31
8.7 Computer Use at Home.....	34
8.8 Employees' Perceived Benefits of Telework.....	36
8.10 Time / Distance /Expenses.....	38
8.11 Overtime Work	41
8.12 Home Work Hours.....	42
8.13 Computer Usage at Work.....	44
8.14 Computer work hours a Day	45
8.15 PC Usage Purposes	45



8.16 Problem Solving	46
8.17 Ability to Plan Ahead.....	48
8.18 Preferred Communication Mode	50
8.19 Frequency of Interaction	52
9. Data Analysis & Discussion – Potential Telework Employer	55
9.1 Size of Company.....	55
9.2 Organizations surveyed by Industry	56
9.3 Current Costs – Office Space, No. of Pc's.....	56
9.4 Staff who work out of office	57
9.5 Allow Staff to Telework?.....	58
9.6 Perceived Benefits & Drawbacks of Employers	59
9.7 Retain Employees.....	64
9.8 Strategies inducive to Telework	65
9.9 Functional Area Best Suited to Telework	67
10. Further Analysis	69
10.1 Willing to Telework - Employee	69
10.2 Willing to Telework - Employer	71
10.3 Regression Analysis – Employee	72
10.3.1 Demographic factors	73
10.3.2 Suitability Factors	74
10.4 Regression Analysis – Qualitative Factors - Employee	75
10.4.1 Qualitative Factors - Gender.....	75
10.4.2 Qualitative Factors - Residence	75
10.4.3 Qualitative Factors – Plannability of work.....	76
11. Conclusion	77
11.1 Summary of Findings.....	78
11.1.1 Potential Telework Employee.....	78
11.1.2 Potential Telework Employer	81
11.2 Recommendations.....	83
11.2.1 Promotion.....	83
11.2.2 Technology & Infrastructure.....	84
11.2.3 Employees.....	84
11.2.4 Employers	85
12. References.....	87
13. Bibliography.....	88
Appendix A - Operationalization.....	90
Appendix B - Questionnaires.....	92
Appendix C - Basic Statistics – Employee Survey	95
Appendix D - Regression Analysis – Employee	100

Table of Figures

Figure 1 : Phases of teleworking diffusion in each area	11
Figure 2 : Continental breakdown of the clusters according to e-work indicators.....	13
Figure 3 : Project Schedule	22
Figure 4 : Growth of Internet in Sri Lanka.....	24
Figure 5 : Cost of internet usage charges to an urban user and Rural user	24
Figure 6 : Like to Telework?.....	27
Figure 7 : Disciplined to Telework	28
Figure 8 : Need & Have equipment to Telework	28
Figure 9 : Percentage Having Needed Equipment to Telework	29
Figure 10 : Use Telework if funded by Employer	30
Figure 11 : Potential Telework Frequency	30
Figure 12 : Respondents by Gender	31
Figure 13 : Respondents by Age Group.....	32
Figure 14 : Responses by Industry	32
Figure 15 : Respondents by Hometown	33
Figure 16 : Respondents by Current Residence	33
Figure 17 : Travel to work from Hometown	34
Figure 18 : Have a Computer at Home	34
Figure 19 : Internet Use at Home	35
Figure 20 : Purposes of Internet use.....	36
Figure 21 : Perceived Benefits of Telework.....	36
Figure 22 : Histogram – Time Spent on the road.....	38
Figure 23 : Histogram – Distance to workplace.....	38
Figure 24 : Histogram – Expenses for transport per month	38
Figure 25 : Logarithmic Chart of Time / Distance / Expense	39
Figure 26 : Scatterplot of Expense per day vs Distance.....	40
Figure 27 : Line Chart of Distance travelled vs. Time Taken.....	40
Figure 28 : Overtime work hours as a percentage of Normal (40) work hours	41
Figure 29 : Percentage currently taking work home	42
Figure 30 : Home work hours as a % of Normal (40) hours.....	43
Figure 31 : Use a computer at work?	44
Figure 32 : PC Hours a day	45
Figure 33 : PC Usage Purposes.....	46
Figure 34 : Problem Solving	47
Figure 35 : Problem Solving Independence – Weighted Scores	47
Figure 36 : Ability to plan work ahead	49
Figure 37 : Ability to plan work ahead – Weighted Scores	49
Figure 38 : Preferred Communication Mode	50
Figure 39 : Preferred Communication Mode – Weighted Scores	51
Figure 40 : Frequency of Interaction.....	52
Figure 41 : Frequency of Meetings	53
Figure 42 : Frequency of Interaction – Weighted Scores.....	54
Figure 43 : Size of Company	55
Figure 44 : Organizations surveyed by Industry	56
Figure 45 : Frequency of staff currently working out of office.....	57
Figure 46 : Allow staff to Telework?.....	58
Figure 47 : Perceived Benefits of Employers.....	59
Figure 48 : Perceived Drawbacks of Employers.....	60
Figure 49 : Employees retired though capable.....	64
Figure 50 : Employees resigned due to commitments	64
Figure 51 : Part time workers important?.....	65
Figure 52 : Cost Reduction important?.....	67
Figure 53 : Functional areas best suited to Telework.....	68

Executive Summary

Sri Lankan commuters daily face problems of transport in traveling to and from their places of work. Traffic Congestion, poor road conditions and an inadequate public transport system creates unnecessary hassles and stress for the average commuter.

The aim of this research was to ascertain if teleworking can be introduced as a viable alternative mode of working to eradicate the problems faced in commuting as well as bring about economical, environmental and social benefits in terms of increased productivity, reduced real estate and administration costs, less pollution and improved quality of life for employees.

The objectives of this project are to identify critical success factors for teleworking and determine if Sri Lanka is able to meet the needs for teleworking, and to find out what the perceptions of information workers and their employees are with regard to teleworking.

A survey was carried out by means of e-mail questionnaires and telephone interviews and also with face to face interviews with a few employers to get their feedback on the subject.



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

It was found that many employees seem agreeable with the idea of telework, and also that several employers would not mind certain of their employees teleworking. But it was also found that several challenges exist in relation to telework. From an employees point of view certain assumed benefits such as enablement of more free time and savings in costs were not perceived. Similarly employers thought that employees being disciplined to telework, security concerns, difficulty of monitoring & measuring performance and opposition from senior management would be obstacles to telework. Also employees did not see much benefit from telework in the aspects of improving productivity and cutting costs.

Therefore although a rather positive answer was received regarding willingness to telework of both employees and employers, many future challenges which need to be addressed before adopting telework were also found.