Recommendations

5.1 Employment Strategy Framework

As mentioned in my literature review, underemployment of people with disabilities costs the economy hundreds of thousands of rupees a year in lost earnings and social welfare. Not only in monetary terms, it is an enormous waste of talent and skill.

The interviews, surveys, analysis, data gathered together with the literature review helped me to formulate a strategic framework as outlined below to get the elderly and differently abled to the economic workforce. In the context of currently prevailing high and persistent unemployment in the differently-abled sector, it is clear that we need an Employment Strategy Framework which gives an overall direction on the way forward. Since it will take some time to overcome the unemployment problem among the differently-abled, this Framework identifies the short and long term strategies to follow. These strategies are primarily based on the following sections.

University of Moratuwa, Sri Lanka.

- Education and Training onic Theses & Dissertations
 Improve the level of basic and post-secondary education and work-related skills
 for persons with disabilities
- Employment Opportunities and Participation
 Expand the availability, accessibility and quality of employment opportunities for less-able persons, in partnership with business and labour. Improve the labour market situation and independence of persons with disabilities through employment-related activities.
- Connecting Employers and Persons with Disabilities Enhance awareness of the abilities and availability of persons with disabilities and strengthen persons with disabilities' knowledge of labour market opportunities
- Building Knowledge
 Enhance the knowledge base, which contributes to continuous improvement of labour market policies and programs for persons with disabilities.

Short term strategies

- Education and Training
 - o Differently abled

As a whole in Sri Lanka there is no strong educational system built for differently-abled people. Hence in the long run, we need to focus on the ICT training for those people targeting on the market requirements. Currently the

Social Services Department handles eight training centers, and there are many more training centers governed by private companies. As an immediate solution, I suggest the training programmes should be prepared according to the currently available ICT courses and the standard evaluation systems should be applied where ever possible. For example, if a differently-abled person follows training on Programming in Java, at the end of the course he should be ready to take the Sun Certification Tests, which will make him employable around the globe.

o Elderly

Training wise, elderly people will not have much difficulty in grasping the concepts of ICT and how to use ICT. But through the interviews I held in my research, I found out that most of the senior citizens were not given proper ground knowledge on using computers. They were directly trained on the applicability area (for example, banking applications) and they lack the fundamentals. Hence I suggest all the ICT training courses should include a fundamental section unless the participants have covered it before. In addition to this I also experienced that older people are less willing to learn from youngsters. The preference for elders is learning from friends and family. In order to get the best out of the elders, the trainers should be 'friendly' with accessibility training, gentleness, patience and an ability to ask and listen before leaping inversity of Moratuwa, Sri Lanka.

Employment Opportunities and Participation

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o Differently abled

At present, only a handful of differently abled people can be found who can be considered as ICT experts. Most of the differently abled people who go for training in ICT lack the relevant resources to practice them in their daily life. Because of these conditions, it doesn't show a considerable participation of the differently abled in the ICT industry employment.

Customer Service Representatives

As an initial step towards employment participation in ICT, most of the differently abled people can work as telephone operators or customer service representatives (CSR). These CSRs can respond to customer inquiries by phone in cases where the inquiries do not involve the use of customer information. This system can create part-time employment for hundreds of employees.

 Increase access to affordable, individualized, portable, employment-related disability supports.

There are already many assistive technologies developed for the differently abled in other countries such as software for screen readers, screen magnification, text readers and so on. As short term measures, we can concentrate on less expensive solutions such as TDD (Telecommunication Device for the Deaf). With a basic computer training deaf or people with hard hearing can be made to work in

places such as call centers providing these less expensive devices connected to the computers.

• Increase and support work and volunteer placements.

As my research shows, most of the companies in Sri Lanka today have a negative perception towards employing differently abled and elderly people. Volunteer placements will help to tone down this feeling and employers will look for ways to employ these people once they identify the talent and commitment in them.

Enhance job coaching and mentoring services.

Social services department of Sri Lanka should take an active role in finding employment opportunities for differently abled. As the differently abled are not an integrated part of the general employed community, conducting programmes for job coaching and mentoring becomes essential. These are the initial steps the department can take over before investing on assistive equipments to make the differently abled improve their self-determination, self-respect and dignity.

o Elderly

- To overcome the major limitation of resources (computers and other ICT devices) in employment participation from the part of elderly people, we can use the outdated personal computers (PCs) passed on by many companies as a start. Once the elderly people learn to use and work with the systems, they can be given new PCs and a targeted task.

 Dissertations
- · Connecting Employers and Persons with Disabilities
 - In the short run, direct contacts are the most practical way of getting employed. Directly contacting differently abled persons to assess their abilities and skills and guide them towards available jobs that suit the nature of their handicap will generate successful results. Currently there are many NGOs working for the differently abled people who are not linked with the department of social services. I suggest that social services department should have links with these NGOs and the department should overlook the programmes held by these NGOs. As the department has direct contacts with the government, they can take an active role in promoting the differently-abled people through campaigns, press releases and mainly I believe that government must take a leadership role and set the norm for including people with disabilities in the workforce.

Long term strategies

- Education and Training
 - o Improve digital literacy

By interviewing principals and teachers of several schools for the differently abled, I found out that there is neither a proper curriculum nor trained ICT teachers to teach ICT for the differently abled. With the advancement of ICT and technology, digital literacy is identified as a basic skill after literacy and numeracy. Hence social services department together with the NGOs should work towards establishing a proper curriculum and a network of trained teachers based on the industrial requirements for the differently abled. When the differently abled people are trained in ICT and other technical areas their confidence will be boosted and these technologies will give them enough room to prove their capability.

Professional elders seems to have a basic level of digital literacy and show a keen interest in improving their level while the retired professionals elders seems to lack digital literacy and they are not willing to participate in ICT. This might be mainly due to the perception they have about ICT and educational and awareness programs through mass media can contribute a lot in attracting these elders to the ICT field.

o Expand pre-employment training and skills upgrading opportunities (e.g. technical aids and equipment).

In addition to education system, there should be a proper training framework which takes a step by step approach to an exhaustive level. This type of training will not restrict the differently abled people in clerical work but will show more opportunities for them to work with. Training should be considered as a vehicle to employment. By working with national state agencies and other NGOs, we should ensure that their trainee and internship programs are open to qualified people with disabilities. These can be started with on-paid internships and can be enhanced to paid traineeships by stressing the companies as a positive action measure aimed at facilitating the integration of differently abled people in the workplace

Most of the schools for the differently abled still carry out cane and basket weaving and other outdated training courses as their vocational training courses. Instead of these less productive courses, social services department should take the initiative to introduce more market demanding training courses. Even though ICT training initially requires a monetary

investment, negotiations can be made with the private sector to produce ICT experts on the condition that they do the initial investment.

• Employment Opportunities and Participation

o Elders

As per my analysis it shows that most of the elders are willing to be reemployed in the same area where they worked, through ICT. For example a banking manager with his expertise in banking can engage in banking related activities through ICT. These people can be good candidates for business processing outsourcing (BPO) companies. Having the expertise in the relevant field, the elderly employees can contribute a lot if Sri Lanka partners with other companies to develop BPO operations.

o Differently abled

Appropriate assistive technologies are key for people with disabilities

Differently abled people will often use something called adaptive or assistive technology to access ICT applications. In the recent past, technological progress has been phenomenal Today, screen-reader software converts computer text into speech for people with visual impairments (for example Jaws, Hal and Window-Eyes are popular examples of screen readers.). Puff sticks and other assistive devices enable people without fine motor skills to use a PC. Improvements in speech-recognition software will soon enable people who are deaf or hard of hearing to participate in meetings by using a laptop instead of a sign-language interpreter.

Most of the time, these technologies are costly and are implemented in English. In Sri Lanka, as there are many software companies, there is a huge opportunity to build those systems in house in Sinhala language. For example, Sri Lanka Institute of Information Technology is currently developing a system for the Council for the Blind to convert Sinhala text to Braille and Sinhala speech to Braille. This is cost effective and can be used by most of the visually handicapped people in Sri Lanka.

o Software Application Development

Software giants are the best organizations to understand the societal needs by providing the required placements. The software industry is a "Mind Industry". The main resource in these software industries is the intelligence and the logistic attitudes. These can be provided in abundance by differently-abled staff. My survey data shows that most of the differently abled and elderly participants show a keen interest in following

training on software development, specially the web development. The communication technologies have evolved in such a way that most of the differently abled people can become experts in software development if they have the commitment even in a country like Sri Lanka without most of the infrastructure facilities for differently abled.

Enhancing Telework

Rather than merely becoming telephone operators, with proper training differently-abled and elders can be made to be take more advanced roles through telework. This can be easily applied to the software development where teleconferencing and a network connection will remove the daily commuting to work. In addition to the transportation, telework solves many issues for the differently abled. Rearrangement of the premises to make room for wheelchairs, change in meeting rooms are no longer needed, instead the employees can be directly given the tasks and the results can be downloaded from the office.

In order to get this practiced, the only concern is that telework requires the individual to be organized and able to work independently, which means that it can only constitute a long-term solution. A proper training and volunteer placements will give the necessary start for the employment of differently abled through telework.

University of Moratuwa, Sri Lanka. Improving accessibility Theses & Dissertations

Accessibility consists of building and distributing a hardware or software product whilst ensuring that its content and application are available to the broadest possible audience, independently of the fact of whether individuals are using assistive technology or not.

ICTA is contributing a lot towards improving accessibility in Sri Lanka for the general community. This should be extended to the disable community, not in an ad-hoc manner but rather in an organized way after a proper analysis on individual differently abled needs and the outcome. Mere internet connections or a computer will not improve the differently abled capability or skills, but it might boost their confidence and encourage them to take new leaps in their life. Low-cost purchase schemes, donations, low cost internet connections will be the tools to improve accessibility particularly in disadvantaged communities such as amongst the elderly and differently abled persons.

• Connecting Employers and Persons with Disabilities

o Providing interface

ICT not only introduces new areas of employment, but enhances current employment opportunities. The differently abled and the elderly who are not willing to take up a career in ICT can use ICT as an interface to market their products to the rest of the world. Customers all around the globe will be attracted to the products of the differently abled through a proper on line website.

- Organizations for the differently abled can introduce training in ICT as investments for the companies. The companies will do the initial investment on the equipment and training and in return the trained differently abled will work for the company for a number of years depending on the investment. As differently abled employees are more loyal and committed to work, companies can get a better return through training the differently abled rather than the ordinary employees.
- Enhance education and awareness strategies to address employer concerns related to hiring persons with disabilities. As my research shows most of the employers have a negative perception about employing the differently abled in their company. These should be addressed by the governmental and non-governmental organizations working for the differently abled and this information should be published through the media (written press, audiovisuals and multimedia), publications (brochures and leaflets), seminars and exhibitions and fairs
- Enacting a policy to employ a specified number of differently abled people or more is already done in Sri Lanka, but cannot be seen practiced by even the governmental organizations. In my view, employing differently abled cannot be done merely through force, but educating and making the employers aware of the benefits they gain will make them employ the differently abled. Companies should understand diversity and having differently abled employees in the work force encourages the management and workers to develop a positive work culture of innovations and flexibility.
- Building on the Existing Knowledge Base
 - O Build a comprehensive knowledge base through research and reporting on best practices.

Number of researches and surveys are done on differently abled and elders through out the country. These researches are done by various parties on their interests and there is no one place or a point person to contact regarding these researches. Social services department should take the responsibility of building a comprehensive knowledgebase with these researches with the assistance of university staff and other NGOs. Not only this database be built, but it should share research findings and promising practices through out the globe.



o Improve data collection systems and program evaluation to better assess program effectiveness.

It is a known fact that neither the social services department nor any other organization keeps track of the data and the programmes conducted for the differently abled and the elderly. A system should be implemented to keep track of the data at least from the new programmes to be done for the differently abled. This can be simply done by registering the NGOs and governmental offices working for the differently abled into the system and asking them to update the database whenever there are new programmes or additional data about the differently abled.

A person's physical abilities often cannot be changed, but the attitudinal and physical environment in which they live certainly can. The above mentioned employment strategy framework is my contribution from my research on how to change the attitudinal and physical environment for the differently abled and elderly through ICT.

5.2 Future Research

This research represents a preliminary study of the "Economic inclusion of the elderly and differently abled through ICTM. A more in depth study should be carried out in each section to get the clear and precise view and the way to go forwards

In this paper I have detailed the analysis of the first factor of the theoretical model which was introduced in chapter 2. Similar analyses should be carried out on all the influencing variables. These variables will have a varying degree of effect on the "Feasibility of elderly inclusion in the economic workforce through ICT". To represent this varying degree, the theoretical model can be extended by assigning weightings to each of these influencing variables. For example, "willingness to learn and work in ICT" should have more weight than "accessibility", reason being that accessibility can be improved fast by providing the necessary equipment, but it will take more time to change the level of "willingness to learn and work in ICT" as it should be addressed through more training, awareness campaigns and media contributions. By having this weighted model, the relevant organizations can give the highest priority for the most weighted influencing variable, when they are going take action.

In the area of differently abled, further research and actions should be taken in various aspects. As per my analysis, in order to bring the differently abled "on-board" to the economic stream, they should have a sound education and training. The prevailing educational and training systems are neither organized nor futuristic. An extensive study should be done to organize the education system for the differently abled so that they can be "marketed" to the future organizational needs. In addition, a research should be done on how best we can use ICT to train and make the less abled sector "able".

5.3 Conclusions

As a country Sri Lanka is emerging as a potential destination for ICT outsourcing resulting in a boost of career opportunities in ICT. These expanding career and business opportunities can be used to harness the capabilities and the potential of elderly and differently abled communities in Sri Lanka. In this research I analyzed the feasibility of getting the elderly and differently abled segments of the society to the economic work force through ICT.

The research included a hypothesis analysis on the "willingness of ICT usage among the elderly people in Sri Lanka". The analysis of the sixty participants of the elderly community resulted in a Z-score value of 0.197 which was below the critical values, hence showing that most of the elders are not willing to use ICT. How ever the extended hypothesis analysis with the employed elders resulted in an exception. The Z-score value being 1.502 resulted in rejecting the null hypothesis, thus concluding that elderly people who are currently employed are willing to use ICT. Interviews with "non-users" reveal that the main reasons for not using ICT are the lack of awareness of the potential benefits of this technology and the anxiety about whether they can manage to learn and use ICT at their age. ICTA and other related organizations can take the main streams of interest for elders in ICT, which I have shown in Chapter 4, as the base and plan further training and career opportunities for the eldersy community at uwa. Sri Lanka.

Electronic Theses & Dissertations

People with disabilities are perhaps the single segment of society with the most to gain from the new technologies of the electronic age. Yet the governmental and none governmental organizations in Sri Lanka have not taken any major steps even to lay the foundation for the differently abled community to reap out the most from technology. Only active involvement and proper organization between the organizations caring for the differently abled can make this happen through restructuring the education and training system for the differently abled.

The employment strategy framework sections, elaborated under Chapter 5 takes into account most of actions which are lacking and can be taken as a guideline to increase the productivity of the "less-able" through ICT. The recommendations discussed in the above sections of the paper are not onerous, but they need the commitment and proper planning of the governments and social partners working for the differently abled and elderly communities.

Thus this research shows "economic inclusion of elderly and differently abled in Sri Lanka through ICT" can be achieved through proper education and training with the commitment of government; intergovernmental, private and civil society organizations.

Abbreviations:

ICT	Information and communication Technology
PDA	Personal Digital Assistant
IT	Information Technology
ICTA	Information and Communication Technology Agency
BPO	Business Processing Outsourcing
MS	Microsoft
NIBM	National Institute of Business Management
CSR	Customer Service Representative
NGO	Non Governmental Organization
TDD	Telecommunication Device for the Deaf



References:

- [1] C Stephanidis, "Disabled and Elderly People in the Information Society," *ERCIM News*, No.28, January 1997. Available: http://www.ercim.org/publication/Ercim_News/enw28/intro.html. [Accessed March 23, 2006].
- [2] W. I. De Silva, "How Serious is Ageing in Sri Lanka and What Can Be Done about It?," *Asia-Pacific Population Journal*, vol. 9, no. 1, pp.19-36, 1994. Available: http://www.unescap.org/ESID/psis/population/journal/1994/v09n1a2.htm. [Accessed March 23, 2006].
- [3] Department of census and statistics Sri Lanka, "Population Statistics," *Census of Population and Housing 2001*, 2005. [Online]. Available: http://www.statistics.gov.lk/population/index.htm. [Accessed: March 23, 2006].
- [4] N. Gaminiratne, "Population Ageing, Elderly Welfare, and Extending Retirement Cover: The Case Study of Sri Lanka," *Overseas Development Institute –London*, April 2004. [Online]. Available:

http://www.odi.org.uk/esau/publications/working_papers/esau_wp3_screen.pdf [Accessed: March 23, 2006]versity of Moratuwa, Sri Lanka.

- [5] W.B.J.Fernando, "General Overview of Disability," UNESCAP/CDPF SEMINAR ON THE INTERNATIONAL CONVENTION, November 2003. [Online]. Available: http://www.worldenable.net/beijing2003/papersrilanka.htm [Accessed: March 23, 2006].
- [6] The British Computer Society, "Accessibility gap for disabled widens," *ITNOW*, March 2006. [Online]. Available: http://www.bcs.org/upload/pdf/mar06.pdf [Accessed: March 23, 2006].
- [7] Practical Action Technology challenging poverty, "Diriya 2004," March 29, 2005. [Online]. Available: http://www.itdg.org/?id=diriya_2004 [Accessed: March 23, 2006].
- [8] C. Siriwardane, "Motor and upper limb disabled people in agricultural industry in Sri Lanka," Sustainable Development Department (SD), July, 1997. [Online]. Available: http://www.fao.org/sd/PPdirect/PPre0041.htm [Accessed: March 23, 2006].
- [9] J. Fink, A. Kobsa, and A. Nill, "Adaptable and Adaptive Information Access for All Users, Including the Disabled and the Elderly," *German National Research Center for Information Technology*, 1997. [Online]. Available: http://www.ics.uci.edu/~kobsa/papers/1997-UM97-kobsa.pdf [Accessed: March 23, 2006].

- [10] P. Weerasekara, "New lease of life for disabled at Job Fair," *DailyMirror Financial Times*", November 1, 2005. [Newspaper].
- [11] B McIntosh, "An employer's guide to older workers: How to win them back and convince them to stay," School of Business Administration. Available: http://www.doleta.gov/Seniors/other_docs/EmplGuide.pdf#search=%22An%20employer%E2%80%99s%20guide%20to%20older%20workers%3A%22 [Accessed September 20, 2006].
- [12]_H. Y. Ching, "The disabled as a potential IT workforce," the Star Online.com. Available:

http://202.186.86.35/special/online/disabled/default.html [Accessed September 12, 2006].

- [13] Central Bank of Sri Lanka. "The consumer and socio economic survey report 2003/04", Consumer Finances and Socio Economic Survey Report 2003/2004 part II. [Accessed April 5, 2006].
- [14] U.S. Environmental Protection Agency, "Guidance on Choosing a Sampling Design for Environmental Data Collection," *EPA/240/R-02/005*, December 2002. [Online]. Available: http://www.epa.gov/QUALITY/qs-docs/g5s-final.pdf [Accessed: August 18, 2006].
- University of Moratuwa, Sri Lanka.
 [15] S. Steyaert, S. Eggermont, H. Vandebosch, "Towards the desired future of elderly and ICT: Policy recommendations based on a dialog with senior citizens", Poiesis & Praxis: International Journal of Technology Assessment and Ethics of Science, Volume 4 Number 3, September, 2006 [Online].

Available: http://www.springerlink.com/content/y88165j2427k18h2/[Accessed: September 28, 2006].

- [16] E. Mosner, C. Spiezle, "The Convergence of the Aging Workforce And Accessible Technology", *Microsoft Corporation*, July 2003 [Online]. Available: http://www.microsoft.com/enable/aging/convergence.aspx [Accessed: September 18, 2006].
- [17] K.A.P. Siddhisena, "Socio-Economic Implications of ageing in Sri Lanka: An Overview", Oxford Institute of Ageing Working Papers, October 2005 [Online]. Available:

http://www.ageing.ox.ac.uk/publications/oia%20wp%20105%20siddhisena.pdf [Accessed: November 8, 2006].

[18] Manufacturers' Association for Information Technology, "SRI LANKAN ICT INDUSTRY", *MAIT*, July 2005, Volume 49 [Online]. Available: www.elcot.com/mait-reports/srilankan%20ICT.pdf. [Accessed: February 1, 2007].

[19] DBTAC Southwest ADA Center, "Definition of a Disability", [Online]. Available: http://www.dlrp.org/html/topical/Disability/Dis_definition.html. [Accessed: February 1, 2007].

[20] Executive Board of the United Nations Development Programme and of the United Nations Population Fund, "Executive Board of the United Nations Development Programme and of the United Nations Population Fund", August 2001 [Online]. Available: http://www.undp.org/execbrd/archives/sessions/eb/2nd-2001/DP-FPA-LKA-6.pdf. [Accessed: February 1, 2007].

[21] United Nations, "Sri Lanka Common Country Assessment", May 2000 [Online]. Available: http://www.undp.org/rbap/Country_Office/CCA/Cca-SriLanka2000.pdf. [Accessed: February 1, 2007].



Appendices

Questionnaires

Three questionnaires were developed for the elders, differently abled and the organizations which are attached below.

Questionnaire for Elders

Questionnaire for MBA Research

Study of identifying how Information and Communication Technology (ICT) can be used to improve the productivity of differently abled and elderly.

Dear Sir/Madam,

I am a postgraduate student of University of Moratuwa, engaged in a research study on "Identifying how Information Technology (IT) can be used to improve the productivity of differently abled and Identify! Sasy a partial afulfillment of the Master of Business Administration (MBA in IT) program Theses & Dissertations

This questionnaire is a part of the research study. I would appreciate if you could spare few minutes of your precious time to fill the questionnaire.

Information contained in this questionnaire will remain completely confidential and be used solely for the academic purposes. Further, I am not requesting you to provide your name, Company name etc, as I want to assure your anonymity.

Thank you,

D.P.Samarasinghe. gunadp@yahoo.com

Personal Information:

1. Age:
Between 40-50

Between 40	-50		Be	tween 61-70			
Between 51	-60		Αb	ove 70			
2	.1						
	2. Gender: Male Female						
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Do part tin		ity		Other			
150 part till	ie work			Other			
	If "Other" pl	ease spe	cify	in detail			

6. If you are not currently employed:

• Please tick one or more of the following that best suits your current situation

Situation:	
I feel satisfied with the way I spend the life	
I want to be socially interactive working with people	
I like to spend a totally leisured life	
I feel I can work for some more years	
I like to work full time	
I like to work part time	
I like to work alone	
I like to work with people	
I like to work at home	
1 like to work in an office	
I like to work with new technical devices	
I like to take similar responsibilities what I have taken earlier	
I like to perform an analytical job	
I like to perform a routine job	

I have to work because I have to find money for my expenses	
I have to work due to my personal commitments	
I like to work because I want to be medically fit sertations	

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Information and Communication technology related Information:

7. Indicate the extent to which you agree with the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I like to work with computers as a hobby.					
I like to work with computers and other ICT devices, as it is a new technology.					
I like to learn and work in ICT as I like to					
get new experiences.					
I like to learn and work in ICT because then I feel I am young.					
I like to learn and work in ICT, but I have other personal commitments.					
I do not think working with computers will give me any value at this age.	_				
I like to learn and work in ICT if that gives me an additional income.					

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
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	ou carry out most with the computer daily:				
Documentation (MSWord, Excel)					
Data loading					
Accounting (Excel, QB, Sage, Accp	ak)				
Software application development					
E-mail / Internet browsing					
Company packages					
Other					
better and faster? Yes No	devices can help you to do your daily functions				
If <u>Yes</u> , in which way?					
What kind of obstacles v	nity to learn and work with a computer would you face? of Moratuwa, Sri Lanka.				
A ATTACK					
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• What is the area you wo	t.ac.lk uld like to work in?				
Documentation					
(MSWord, PageMaker, Excel)					
Data loading					
Accounting (Excel, QB, Sage, A	Accpak)				
Software application developme	ent				
Games					
Any area					
Mention any specific areas not g	given above				
11. Have you followed any Information and communication Technology (ICT) course?					
Yes	No				
If <u>Yes</u> , please provide some details about 1CT	out the most interesting course you have followed				
Course Name					
Institute					
Duration					
Why do you find it interesting?					

	Yes	No		
If <u>No</u> , please	specify in which	n way you need	help to get the expo	erience:
Do you think	the course adde		life?	
	Yes	No		
•	fied with the of	pportunities y	ou have got so far	to work with
technology?	Yes	No		
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Thank you for your participation.

Questionnaire for Differently-abled

Questionnaire for MBA Research

Study of identifying how Information and Communication Technology (ICT) can be used to improve the productivity of differently abled and elderly.

Dear Sir/Madam,

I am a postgraduate student of University of Moratuwa, engaged in a research study on "Identifying how Information Technology (IT) can be used to improve the productivity of differently abled and elderly" as a partial fulfillment of the Master of Business Administration (MBA in IT) program.

This questionnaire is a part of the research study. I would appreciate if you could spare few minutes of your precious time to fill the questionnaire.

Information contained in this questionnaire will remain completely confidential and be used solely for the academic purposes. Further, I am not requesting you to provide your name, Company name etc, as I want to assure your anonymity.

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Thank you,

D.P.Samarasinghe. gunadp@yahoo.com

<u>Personal Information:</u>

14.	A Differently abled person is defined as someone with a physical or menta
	impairment that has a substantial and long-term impact on their ability to
	carry out day-to-day activities. This excludes situations where sight can be corrected by glasses or contact lenses.

corrected by a	glasses or con	tact lens	ses.				
Having read this, do y	ou consider yo	ourself to	be covered	by the d	efinition?		
Yes	No			•			
If <u>Yes</u> , and we your disability				the bo			of
Dyslexia (Difficulty with reading and writing)	Deaf/hea loss	ring	Mental health difficulty	,	Progressiv disability illness Cancer)		
Visually handicapped/partially sighted	Mobility (physical disability		Learning disability		Other		
15. Age: University of Moratuwa, Sri Lanka. Between 18 + 30 Electronic Between 4 1850 Dissertations Between 31-40 Www.lib.mrt.ac.ik 16. Gender:							
Male		Female					
17. Highest Level of Education:							
	ary Level		ergraduate	Post	Graduate		
Year 8 Adva	nced Level	Grad	luate	Oth	er		
If any other qualification, please specify:							
18. Highest level Diploma level		ion Tec	chnology ed	ucation	(eg: Certi	ficate lev	el,

	pymeni information:
19	. Post:
20	. What are your employment responsibilities?
21	. Do you have any difficulty in performing your duties at your workplace?
Yes	No
	If Yes, please describe the difficulties you face in your workplace:
22	. Do you think that you can handle more responsibilities than the ones you are assigned with?
Yes	assigned with? Electronic Theses & Dissertations www.lib.mrt.ac.lk
	If Yes, what additional responsibilities can you take over?
Yes	. Are you satisfied with the work you are assigned with?
	If <u>No</u> , what changes could be made to improve your job satisfaction?
24	. Are there any special devices that you know which will help you in
Yes	performing your job?
103	
	If <u>Yes</u> , Please give details of the device/s:

Information and Communication technology related Information:

25. Do :	you get any services of a comp	uter operator?
Yes	No	
If <u>Y</u>	es, please specify the services:	
Docume	ntation	
(MSWor	rd, PageMaker,Excel)	
Data loa	ding	
Account	ing (Excel, QB, Sage, Accpak)	
Other		
26. Do y	you have any experience in wo	rking with computers/ ICT devices?
Yes	No	-
L		
If Y	es,	·
	******** ****************************	at you have used other than the computer:
L		
If N	o, do you like to learn how to we	ork with such devices?
Yes		Ioratuwa, Sri Lanka.
		ses & Dissertations
27. Do s	you use a computer in perform	
Yes	No.	your daily works
103	110	
If V	es, please specify the functions	you carry out with the computer:
Docume		Toda carry out with the computer.
1	rd, PageMaker,Excel)	
Data load		
	ing (Excel, QB, Sage, Accpak)	
	e application development	
E-mail		
	browsing	
Other		
		ices can help you to do your daily functions
bett	er and faster?	
Yes	No	
If Yes, in w	hich way?	
· · · · · · · · · · · · · · · · · · ·		

29. What kind of ol		ace when l	earning/using I	nformation and
Communication '	Technology?			
30. If you are given like to take that o	• •	to learn and	i work with a c	omputer do you
		lo		
If Vac what is the	e area you like to w	ork in?		
Documentation	area you like to w	OIK III:	·	
(MSWord, PageM	laker,Excel)			
Data loading				
	el, QB, Sage, Accp	ak)		
Software applicati				
Any area				
Mention any speci	ific areas not giver	above		
E	Iniversity of Market The State of Market The State of the	loratuwa, les & Diss	Sri Lanka.	enhology (ICT)
If Yes, please provide sor	me details about th	e course/s		
Course Name				
Institute				
Duration				
Have you received	a			
certificate?				
Course Name				
Institute				
Duration				
Have you received	a			
certificate?				
 Does the knowled performing daily of [ained in th	e above course	e/s help you in
If Vac places and	aifu tha area in wh	iah yay yaa :	vour ICT overerie	un a a :
Documentation	cify the area in wh (MSWord,		our ici experie	nce:
PageMaker,Excel)	,			
	cel, QB, Sage,	1		
Accpak)	, , ,6-,			

	Software application development	
	Networking	
	Other	
	Other	
•	Did you get any opportunity to apply gained in the above course/s? Yes No	/experiment the knowledge/experience
	If No, please specify in which way the org	ianization can help you:
	11 140, please specify in which way the org	gamzation can help you.
•	Do you think the course/s added value to	vour career?
	Yes No	
	163	
32	2. What additional training or educati	-
	Information and Communication Tech	nology (ICT)?
	from YY	G : Y 1
	University of Mora	tuwa, Sri Lanka.
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	Bursa	
	www.lib.mrt.ac.lk	
33.	3. Are you satisfied with the opportunities	s you have got so far to work with ICT
	technology?	
	Yes No	
	16 M 1 16 - 10 1 - 16	-d balas
	If No, please specify in which way you no	ed nerp:
l		
2.4	4. Any other Comments:	
J4.	· ·	I.C
	Please use the space below to write a	
	Communication Technology can help yo	ou to improve your career and personal
	life.	
ļ		
Į		

Thank you for your participation.

Questionnaire for organizations

Questionnaire for MBA Research

Study of identifying how Information and Communication Technology (ICT) can be used to improve the productivity of differently abled and elderly.

Dear Sir/Madam,

I am a postgraduate student of University of Moratuwa, engaged in a research study on "Identifying how Information Technology (IT) can be used to improve the productivity of differently abled and elderly" as a partial fulfillment of the Master of Business Administration (MBA in IT) program.

This questionnaire is a part of the research study. I would appreciate if you could spare few minutes of your precious time to fill the questionnaire.

Information contained in this questionnaire will remain completely confidential and be used solely for the academic purposes. Further, I am not requesting you to provide your name, Company name etc. as I want to assure your anonymity.

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Thank you,

D.P.Samarasinghe. gunadp@yahoo.com

1. A Differently abled person is defined as someone with a physical or mental impairment that has a substantial and long-term impact on their ability to carry out day-to-day activities. This excludes situations where sight can be corrected by glasses or contact lenses.

Having read this, do you have any employees in your organization covered by this definition?

Yes No

If $\underline{\underline{Yes}}$, please indicate (using the boxes below) the nature of disabilities that can

be found among your employees

oc round among	your employees.		
Dyslexia (Difficulty with reading and writing)	Mobility (physical disability)	Mental health difficulty	Progressive disability /chronic illness (e.g. Cancer)
Visually handicapped/partially sighted	Deaf/hearing loss	Learning disability	Other

2. If there are differently abled persons with the required qualifications and experience, will you like to recruit them to your organization?

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If No. Please give reasons www.lib.mrt.ac.lk

Yes

3. If your company has any special measures to expand differently abled persons' employment, please describe it below.

4. Do you have any policy, which covers the employment of differently abled people in your organization?

Yes No

5. Which of the following best describes your organization's attitudes towards the recruitment of differently abled people?

We actively encourage job applications from differently abled people	We have no particular view or policy for or against recruiting differently abled people
We see some jobs as more suitable for differently abled people than others	We would not consider recruiting a differently abled person
Other (PLEASE SPECIFY)	Don't know

•	Yes		No								
		s, pleasization		any sp	ecial	reaso	ns to	exte	end the	eir service	in th
	O Gui	12ation									
8. I	Does your o	rganiza	tion force	retire	ment	?			· · · · · · · · · · · · · · · · · · ·		
8. I	Ooes your o	rganiza	ition force	retire	ment	?					
	Yes		No				ll voi	ı aho	0507		
	Yes f you are gi	ven the	No following				ll you	ı cho	ose?		
	Yes f you are gi Extend	ven the	No following				ll you	ı cho	ose?		

11. If elder employees can overcome the barriers due to their age through ICT, what actions would you take from the following?

Provide necessary training in ICT for the elderly employee	
Provide required devices (eg: computers).	
If the employee cannot perform in his current field, find a suitable	
post where he can use his knowledge through ICT.	
If the employee cannot perform due to his age, find ways and means	
of overcoming those through ICT.	
Example: - Daily traveling can be overcome through telecommuting	
Recruit a new employee, accepting elderly employee retirement.	
Offer voluntary retirement scheme	

12. Please specify any additional comments that you want to make on employability of differently abled and elderly people through ICT.

