

2.3 Other Spinoffs from the Advancement in ICT

Change in Working Styles

Telecommuting:

Telecommuting refers to working from home using ICT such as phone, fax and computer, to electronically connect themselves to their offices during normal organizational working hours. The location of work is usually the home but there are also mobile offices where workers travel to a satellite office which are located nearer to the homes. Telecommuting therefore replaces commuting by rail, car or other transport.

Origin

The term telecommuting was first used by the Center for Futures Research at the University of Southern California, to describe a geographically dispersed office where workers can work at home on a computer, and transmit data and documents to a central office via a telephone line.

Telecommuting was initially intended to extend the working day and also to maintain a better work-life balance.

Trend of Telecommuting:

There is an increasing trend in telecommuting especially in information-saavy countries. Telecommuting has been motivated and enabled as a result of information and communications technologies (ICT) that have materialized, as meted out in the table below:

Technology	Impact/Influence
Personal computer	<ul style="list-style-type: none">Makes it possible for individuals to work on documents from home.
Mobile phone	<ul style="list-style-type: none">Added mobility for workers as it is now possible for them to contact anyone, anywhere.
Internet	<ul style="list-style-type: none">Generated the deepest impact, as it allows two-way communication between employers and workers through communication tools such as electronic-mail and instant messaging softwares eg. Windows Live Messenger, Yahoo!Messenger, QQ.
Broadband	<ul style="list-style-type: none">Furthered the feasibility of telecommuting by enabling virtual group collaboration to be possible anyplace, anywhere.

Companies who consider telecommuting view it as a means to achieve greater corporate benefits, such as:

- Reducing amount of office space and thus gaining tax incentives
- Increased productivity
- Better retention of workers due to greater flexibility in working hours
- Improved employee moral and hence reduced sick time leading to better productivity

Telecommuting and the Environment

One point which environmentalists have cited in advocacy towards telecommuting is the benefits it could have in easing traffic congestion and hence reduce air pollution. Although this point has not been greatly evidenced, a June 2008 report by The Climate Group on behalf of the [Global eSustainability Initiative \(GeSI\)](#) has studied the positive externalities that telecommuting could have in fighting Climate Change.

Potential Benefits:

Environmentalists have been advocates of telecommuting as the new way to work because of the belief that Telecommuting has an inclination to reduce pressures on the environment. It is reasoned that telecommuting would minimize traffic congestion and also reduce the amount of fuel consumption attributed to travelling.

In a June 2008 report that is conducted by The Climate group on behalf of the Global eSustainability Initiative (GeSI), the Telecommuting concept has been probed into for its potential as yet another means to save the Earth. In the research, US and UK, two leader countries in the world, have been selected for case study.

In US, the percentage of Americans who telecommute in 2005 stood at 1-2%. The report analysed that suppose 3 million Americans chose to telework, there would be reductions in road usage that translate to a drop in fossil fuel consumption, thereby constituting a consequent carbon gas reductions of 75-100 [MTC O2e](#) in 2030.

However, the report also highlighted that the impact of telecommuting would vary according to the number of days each teleworker spends on telecommuting. In UK, although the UK Department of Transport study states that telecommuting by its citizens has resulted in the decline of 48-77% of travelling by car, the report explains that the figures might not necessarily bring about a genuine fall in the amount of carbon gas emitted if each citizen only teleworked less than three days in a week, while the other days are spent in the office.

Telecommuting was concluded as having the potential to save on the Earth's resources, but the extent to which it is effective would depend largely on its adoption in each country. Even though the impacts at the moment might not be as significant as other measures, telecommuting remains a plausible concept to be further explored and leveraged on to mitigate Climate Change.

Navigation Pane

1.	Climate Change
1.1	Definition
1.2	Causes
	1.2.1 Natural Factors
	1.2.2 Human Factors
1.3	Impacts of Climate Change
2.	ICT as a Solution to Climate Change
2.1	Achieving a Green Business through ICT
	2.1.1 ICT in Manufacturing Sector
	2.1.2 ICT in Transport Sector
	2.1.3 ICT in Building Sector
	2.1.4 ICT in Power Sector
	2.1.5 Case Studies
2.2	Role of the Internet in Promoting Green Awareness
	2.2.1 Government Websites
	2.2.2 Other Internet Mediums
2.3	Other Spinoffs from the Advancement in ICT
	2.3.1 Change in Working Styles
	2.3.2 Change in Lifestyles
	2.3.3 Change in Teaching and Learning Styles
3.	Limitations of ICT in Fighting Climate Change
3.1	Freedom of Expression
3.2	ICT's Two-fold Role
3.3	Inability of ICT to stand as an Independent Solution
4.	Ongoing Research and Development of ICT in fighting Climate Change

4.1	Symposium
4.2	Conference Talk
4.3	Progress
5.	Quotes on ICT and Climate Change
5.1	Quotes
6.	References

References

1. Yeo,G.K.,Oh,B.B.(2008).*ICT and Our Society*.(4th Ed.). Singapore:McGraw-Hill.
2. GeSI.(2008). *REPORT:SMART 2020: Enabling the low carbon economy in the information age* Retrieved on 13 November, 2008 from http://www.gesi.org/index.php?article_id=36