

Topic Introduction: Internet and Society

- In this new topic, we will be exploring some of the issues dealing with the impact of the Internet on the way society functions, and the way society is dealing with the growth of the Internet.
- The purpose of such a topic is for you to think about:
 - What the Internet is for.
 - What your role is with respect to Internet usage and development.

Topic Introduction (cont'd)

- In introducing you to the Internet, the most important thing for me as a lecturer to get through to you is:

"Don't just do something because everyone else is doing it - think about why you're doing it!"

Topic Introduction (cont'd)

- In this topic, I will raise many questions, but for a lot of them, I do not have answers for you.
- You must come up with the answers to the questions yourselves, and it will be based on your lives, your experiences, and your own unique perspectives of the world.

B211 Internet Computing

The Internet and Human Development

Lecture Outline

- Why consider human development?
- Impact of Information and Communication Technologies (ICTs)
- What's needed to have sustainable ICT adoption

The First Question

- In considering the purpose of the Internet, we ask the question:

"What is the point of the Internet if not for human development?"

What do we mean by "Human Development"?

- In considering human development, we can choose to encompass anything in the range between:
 - your own personal development,
 - to everyone in the human race.
- Perhaps for you, that may not be enough. We should also:
 - respect the memories of the people in the past
 - as is done in many traditional cultures
 - consider the welfare of the people in the future
 - as we are doing with "sustainable" developments

"Non-Human" Development?

- Perhaps it is also important for us to consider other biological species besides ourselves.
- What about inanimate objects? Should we consider the development of automated, self-sustaining, reproducing "machinery", without consideration to using them to serve humans?

... now we get into science fiction realms the likes of "The Matrix", and "Star Trek"... for this unit, let's keep our feet more on the ground...

What “Developments” should we consider?

- There are many and varied. A few obvious ones:
 - To gain the basic necessities to life (we all have to eat!)
 - The material luxuries we enjoy.
 - The ability to “expand” our minds, through knowledge and discovery.
 - To gain emotional satisfaction.
 - To be free of bondage - political, economic, social, etc.
 - etc.
- The technologies we study in this unit (and the income you will gain from studying this unit), are only “means” to achieving these developments.

Links between Technology and Human Development

Ref: Figure 2.1 Section 10 of your Unit Reader

The Promise of Information and Communication Technologies (ICTs)

- ICT has the potential to offer improvements
 - Participation in activities
 - Activities previously not accessible by certain people.
 - Eg. cheap communication with family members in other countries, reading on-line books and publications.
 - Open up transparency and accountability for people in power.
 - Economic Opportunities
 - Eg. Rural farmers in W.Aust. accessing markets in S.E. Asia.
 - Improved Health care and other essential services.

The Destructive Potential of ICTs

- ICT also has the potential to enable certain bodies to create
 - Greater inequalities in the distribution of power and wealth
 - Loss of freedoms due to more interdependence
 - the effects of globalization
 - Drive developments in non-essential areas
 - the effects of corporatization
 - technology for technology's sake

The Digital Divide

- The population of users with access to ICTs are biased towards:
 - People in developed countries
 - High income earners
 - High-level of formal education
 - Male
 - Youth
 - City dwellers
 - English speakers

The Digital Divide

- Such disparities in technology access is nothing new.
- Some example diffusions in “old” technologies:
 - Ref: Figures on page 41, section 10 of your Unit Reader.

Requirements for Sustainable ICT Environment

- Creating a networked environment *which is sustainable* is not a simple case of “give them machines”.
- For a country, community and organization to have ICT access which is sustainable, they must have:
 - Access to facilities
 - Education to train the workforce
 - Effective usage by its people
 - A knowledge-based economy
 - Sound policies

Access to Facilities

- The basic hardware, software, and network infrastructure must be available.
- These include:
 - voice and data telecommunication services - including the network hardware supporting it.
 - Internet service providers, including those giving public services such as Internet cafes and telecenters.
 - Affordable prices.
 - Network speed and quality.
 - A market of options for user hardware and software.
 - Service and support for the above.

Education

- People must be educated and trained to *use, develop, and support* the infrastructure in the previous page.
- To do so, we need to:
 - Allow all schools (especially public ones) access to Internet facilities.
 - Integrate Internet training into education syllabus.
 - Have ample professional training programmes in state-of-the-art technologies
 - use the Internet to enhance education

Effective Usage by People

- All technologies will die off if it is not effectively used by members of society.
- For Internet to be adopted long term, we need:
 - people and organizations to go online
 - locally relevant material
 - Electronic and network services to be a part of everyday life
 - ICTs in the workplace.

A Knowledge-based Economy

- A knowledge-based economy would include:
 - Employment opportunities in ICTs.
 - E-Government - government services online
 - Business to Consumer (B2C) electronic commerce.
 - Business to Business (B2B) electronic commerce
 - Business to Employee (B2E) transactions
 - Employee to Employee (E2E) communications
 - Peer to Peer (P2P) services
 - etc.

Sound Policies

- Sound policies (in state, federal and international levels) needs to be in place to facilitate the Internet.
- Some areas of policies with very high impact on the Internet:
 - Telecommunications Regulations
 - ICT trade policies
 - Media policies

The Internet and You

- In moving towards a networked world, one of the key shifts have been the tremendous dependence on *human skills*
 - You can see this from the requirements in previous few pages.
 - The ideal of machines and programs doing everything automatically without human intervention is an illusion
 - History shows that the more technological automation we create, the more we need human skills to drive the environment.
- The purpose of units such as B211 is to increase your skills in operating in the networked world, that compared to the general population
 - You have more control over your own life, and
 - You have more control and responsibility over the lives of other people.

The Internet and You

- This unit aims to achieve that by
 - Increasing your technical understanding, and
 - Promote attitudes which increases productivity.
- What it cannot answer, which you will have to decide for yourself is:
 - “What is your role on the Internet?”
- That is for you to answer yourselves, hopefully being sensitive to some of the issues raised in this lecture.

Further Reading

- Unit Reader section 10 (required) and 11.

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