

Ethics and Transfer of Technology

Professor Mohammed Zeki Khedher
Jordan University
Email: khedher@ju.edu.jo

Workshop on Technology Development in European & Islamic Countries
28-30 Oct. 2002
Al Akhawayn University , Ifrane
Morocco

Ethics and Transfer of Technology

Introduction

Purpose

Transfer of Technology

Ethics:

Western Point of View

Islamic Point of view

Actual situation in Muslim countries

Why this comparison?

Transfer of Technology Examples

Level of Automation

Software

Privacy and security

Copy right and Intellectual property Protection

Harmful software: Viruses, Worms, etc..

Pornography

Conclusions

Purpose

Better Transfer of Technology

Better understanding and relations between people

Why Comparative study is important?

- It is important to know western point of view related to ethics of transfer of technology because it is the source for such transfer
- It is important to know Muslim countries (as well as other developing countries) point of view because they are receiving such technology
- Islam has a big effect on life, behavior and values of Muslims
- Islam has unique phenomena of not being spiritual religion alone but it has a code of life for Muslims
- Islam is the most misunderstood religion on earth
- Comparative study in many narrow fields (such as transfer of technology) may reflect examples for wider fields

Factors affecting Transfer of Technology

- Fast growing technology
- High technology nature
- Globalization: Communication

IT Technology

- Increasing gap between developing nations and developed countries

Transfer of Technology relation to Ethics

- Situation in countries of high technology
 - Economical factors
 - Social and Ethical factors
- Situation in recipient countries
 - Economical factors
 - Social and ethical factors including religious belief
- Ethics governing transfer of technology
 - Natural flow- free trade - No ethics
 - Control by one sided type of ethics
 - Ethics of common and accepted principles (Western and Islamic)

Ethics Definition

Set of moral principles that distinguish what is right from what is wrong

Ethics based on Western Values

- Greco-Roman background
- Legal emphasis: secular
- Changing with time (based on transient values and standards)
- Took centuries to reach a code: e.g. Human rights
- Economical survival as target
- Intended to persuade audience to purchase products and services
- Self regulating advocates
- Image creation and protection: limited personal liability at the corporate level
- Occasional conflict between organizational and personal goals
- Difference of opinions between thinkers (advocate ideals) and capitalists (advocate economical benefits)
- ** Knowledge as commodity for sale
- ** Sex and violence are part of commercial art

Islamic Context

- Quranic Term: Khuluq
- Salihat (opposite to Sayiat)
- Khayr= goodness
- Birr = righteousness

- Qist= equity
- ‘adl= equilibrium & justice
- haqq=truth & right
- ma’ruf=known & approved
- Taqwa=piety

Ethics based on Islam

- Fundamentals are based on Quran
- Practical examples are given in life and action of Prophet Mohammed and the Way his companions understood and implemented his teachings
- Muslims consider Paradise was real on earth at the early time of Islam
- Belief in God and the Day of judgement
- Personal accountability at the metaphysical
- Purity of intent to serve just causes
- Moral courage required
- Compatibility between organizational consensus and personal consensus due to clarity of core values
- Accepting changing of habits (‘urf) as part of legal interpretation
- Ideals of western thinkers agree with Islamic ethics in many cases

Present Ethics in Muslim Countries

- Import of Technology is accompanied by import of western values
- A trend in trying to establish new ethics based on western values
- Legal aspects are in a developing stage
- Adaptation of technology locally is sometimes in conflict with local values
- No universally accepted ethics in Islamic countries other than religious
- High respect to Islamic principles in spite of lack of proper practicing
- Prediction and bringing into practice new rules based on Islamic Principles without conflict with modernization (Going on slowly)

Example: Proper level of automation in Muslim countries

- Best development strategy is not universally agreed upon
- Necessity of proper study of appropriate combination of education, experience and overall development
- Over-automation of the country and under-utilization of the equipment and systems.
- Factors governing suitable level of automation
 - level of literacy
 - unemployment level
 - structure of workforce
 - availability and suitable training of technical work force for operation and maintenance
 - economical strength of the country
 - social aspects of automation

Proper level of automation Ethics Issues:
Western point of view

- Products are originally designed for local environment
- Reason for export is usually economical
- Target countries circumstances may be:
 - Not suitable for the product :
 - Not ethical to export
 - Unknown, Need investigation:
 - Not ethical to export
- Selling old fashion equipment is not ethical
- Reliance on the local assessments is not always ethical
- Ethical burden on the source of these equipment and systems to assess the level of such technology and give advice about the suitable level of automation.
- Ethics may be divided to responsibilities of individuals hence it is violated indirectly
- Since Globalization is in process, Why thinking about trends in research and development for local benefits
- alternative: Global development is more ethical
- Private sector in the west is of limited vision and targets
- Educating people in developing countries is ethically required without enforcing western culture

Proper level of automation Ethics Issues:
Muslim countries point of view

- Overall surveys are not available
- Lack of knowledge of how to tackle survey scientifically
- Experts give their expertise with different social background and values
- Some Unethical practice by some western companies upon decision makers
- Imitating what takes place in developed countries by decision makers in target countries
- Lack of Creativity in studying local level of automation requirement
- ** Internet promotes remote learner
- ** Brain Drain is unethical

Proper level of automation Ethics Issues:
Islamic point of view

- It is a sin and illegal to hide things or characteristics when selling or manufacturing an asset
- It is a sin and illegal to sell a forbidden or harmful asset
- Giving advice to anyone is kind of worship

Ethics related to Privacy and Security
Western point of view

- Changing strategy
- Breaking privacy of individual indirectly
 - e.g. Selling of email addresses. Is it ethical?
 - Collecting information about buying habits, cookies
- Software that breaks passwords and firewalls

- Self-regulation advocates

Some research topics in relation

- Ethical Concerns and Internet Sources for Research Papers
- Social Responsibility and the Internet Resources Users' Perspective on Regulation to Protect Privacy on the Web
- Who Will Censor?
- Ethical Values of Information and Library Professionals
- Cyber-Ethics: Bodies or Bytes?
- Teaching Information Literacy and Computing Ethics: Are they the same thing?
- When Public and Private Collide: The Right to Privacy in the Public Library
- The Virtual Library: Changing Roles and Ethical Challenges for Librarians

Ethics related to Privacy and Security: Islamic

- Once the person (or organization) safeguard himself to a reasonable extent, breaking his privacy and security is both a sin and a legal offence
- Degree of reasonable behavior is affected by the circumstances, nature of the job and habits of the society
- People of good Piety keep themselves far away from such actions willingly

Ethics related to Privacy and Security: Situation in Muslim countries

- Legal situation in many Muslim countries is not clear on privacy and security of high technology

Ethics related to copy right and protection of Intellectual property Western Point of view

- Changing ideas e.g. about internet publications
- Governed by changing legislation
- Example: Microsoft Windows versus Linux

*Ethics related to copy right and protection of Intellectual
property*
Islamic

- It is both a sin and illegal to take another person's belongings without his consent
- Spread of knowledge is regarded as a worship
- Hence protected knowledge should go to minimum and public knowledge should be extended as much as possible
- The first to apply for new type of belonging has a privilege

*Ethics related to copy right and protection of Intellectual
property*
Muslim countries

- Still trying to develop new legislation suitable for local circumstances not dictated by import from western countries

*Harmful Software:
Hackers, Viruses, Worms, etc..*
Western Point of view

- Recently considered as a crime
- Intelligent viruses may spread in the future. What would be the situation?
- Are some of them going to be legal?

*Harmful Software:
Hackers, Viruses, Worms, etc..*
Islamic

- It is a sin to cause harm or damage to others intentionally. Also it is forbidden to force others (to act in certain way) as a revenge.
- It is only allowed to revenge from the offender in the same way (as a reaction and in similar form to the original offence).

Pornography **Western point of view**

- Commercial commodity
- Changing point of view with time
- What becomes familiar becomes acceptable without any reference

Pornography **Muslim Countries**

- Recipient of western products
- Weak actions

Pornography **Islamic point of view**

- Strict prohibition based on comprehensive treatment to sex issues

Professional Islamic Principles related to software

- Products
- Public
- Judgement
- Client and employment
- Management
- Profession
- Related to colleagues

Conclusions

- Better Understanding of Ethics of European and Muslim countries is for the benefit of both sides
- Modern Technology + Islamic Ethics
= New paradise on earth
- Ethics development should be on a global scale
- Research in this field is fresh and is encouraged