INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION DEVELOPMENT BUREAU

ITU-D STUDY GROUPS

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Question: 15/1

STUDY GROUP 1

SOURCE: CARIBBEAN TELECOMMUNICATION UNION

TITLE: INTRODUCTORY CONTRIBUTION: INFORMATIZATION AND
TECHNOLOGY TRANSFER

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- What is informatization.

- What is its current status.

- Where is it heading and what must be done to get there.

- Look at the impact on Intellectual Property Rights, Human Resource Management, WTO
200 Negotiations.

- Country and company experiences (trend & case studies).

The telecommunications and information technology industry is one that is undergoing dynamic
changes. As the use of IT impacts more on our daily lives, there is the need to move from the general
to more specific type scenario. In so doing, there is a need for more emphasis to be placed on the
area of "informatics": In attempting this new, but significant aspect of IT, we will attempt to
determine the following:

1)   Exactly what is Informatics?

2)   What is its current status?

3)   Where is it heading, what can be done to get there?

4)   Case studies and trends.

Informatics basically refers to the use of technology to transfer information form the particular
avenue of origin to the point of utilization. More specifically it refers to the process of acquiring
technical capability from a source different to that of the origin. Informatics is playing an increasing
roll in our lives especially as we move toward globalization and sustainable development. Informatics
is impacting more and more on our daily lives. It currently makes up an integral part of

financial services, commodity markets media, transportation, tourism, education, health and many more.

However, the impact on some areas is more critical and so must be looked at in some more detail.

Impact of informatics on employment

One of the most obvious impacts of informatization on employment is to destroy some existing jobs while at the same time creating others. In the foreseeable future, informatization will more than likely result in the destruction of more jobs than the amount it creates. The labour market will almost certainly become more flexible and insecure. Future working life will no longer be viewed as the job for life but rather will contain periods of full, part-time and self-employment. Further, as the use of IT becomes more dominant, it will become particularly more difficult for unskilled workers to find mainstream jobs. Further there is a fear that informatization would open the gap between the "information rich" and "information poor" and so result in a widening of the gap between developed and less developed countries.

Look also at the issue of jobless growth.

Impact on Human Resource Management

It is important to note that when developing technology that money must not only be invested in technical infrastructure but rather should also include some investment in human capital. As Huss (1991) points out - "the process of technical capabilities must be complimented by investment in human capital (training of personnel and hiring of advisors)". There is a need to keep staff properly informed and trained if they are to fully support corporate policy.

Thus as the use of IT becomes more prevalent, HR strategy should focus on:

– on the job training for technical staff;
– data processing and project management training to include elements of behavioural, social and political dimensions of computerization;
– streamline development on regional basis to ensure uniformity of standards;
– professional development programmes;
– development of local information technology literature.

Further, because of the increasing role of informatization, there are more advanced information systems being employed to assist decision making when confronted by details of individuals, clients e.g.:

– expert systems to aid medical diagnosis, assess entitlement to welfare benefits etc.
– public access terminals to display information on various issues.

Environmental informatics

ICTs can contribute to environmentally benign development. There is now the possibility of telecommitting, teleconferencing, electronic commerce etc. ITCs are thus able to provide a new capacity for monitoring and modelling environmental conditions and can also help to control the level of resource use, pollution, congestion etc. The use of informatics will also serve the purpose of bringing production closer to consumption thereby reducing the need for transport, increasing the number of small enterprises and helping to regenerate local economies. Already data networks are enabling environmental groups to coordinate campaigns and exchange information.

Intellectual Property Rights

One way of accomplishing economic development is through the transfer and acquisition of technology. However before the new technology can be put to use, authorization of the owner must be achieved as well as the technical "know how". This process can be achieved through several legal avenues (e.g. sale assignment, license contract, the know how contract). The impact of informatization on this area is therefore dependent on the intricacies of the method sought to transfer property rights.

Trends in informatization

Informatization is impacting on more and more aspects of our existing. Some areas include:

- Biomedical informatics
- Educational informatics
- Training informatics
- Management informatics/use of Management information systems
- Employment
- Environment informatics
- World negotiations
- International property rights

Case Study: (refer to list of references)

Re: HR Issue - Telebras (Brazil)

REFERENCES

[1]   Electronics, Environment & Employment - Harnessing private gain to the common good - James Robertson

[2]   Technology Transfer & Telecommunications

[3]   Technology Transfer Society (T^2S document)

[4]   Service Firms & Innovation - Telematics and Beyond (Ian Miles, Neville Reeve et al) - November 1996

[5]   Globalized Information Society: Employment Implications (Ronald Richardson, CURDS, England)

[6]   Intellectual Property Reading Material

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