Cyber inclusion through activity

Project proposal

Jean-Marie Leclerc

Directeur général du Centre des Technologies de l'Information (CTI), Etat de Genève, Route des Acacias 82, 1227 Carouge, Case postale 149, 1211 Genève 8, Tel.: +41 22 327 79 67, Fax: + 41 22 327 48 77

jean-marie.leclerc@etat.ge.ch

Abstract: All individuals have the right to express themselves through an activity, in which one's potential can be developed and recognised. On the other hand everyone should contribute to the broad implementation and recognition of this particular right. In the cyber-inclusion project of the Centre of Information's Technologies (CTI) both technological development and inclusion of minorities, in particular handicapped people and people with marginalised lifestyles, are addressed. Three fundamental principles underpin the project process: integration, a three-dimensional approach to activities (requested, necessary and feasible) and adequate structures. The individual human being is the focus of concern.

Key words: handicapped people, inclusion, integration, marginalised lifestyle, networks

INTRODUCTION

All individuals have the right to express themselves through an activity, in which one's potential can be developed and recognised. On the other hand everyone should contribute to the broad implementation and recognition of this particular right. Accordingly, the cyber-inclusion project, of the Centre of Information's Technologies (CTI), addresses in parallel both technological development and inclusion of minorities, in particular handicapped people and marginalised lifestyles. Main aims of the project are establishment of an appropriate environment for the target population, based on their recognised potentials, and then to support the emergence of networks.

Three fundamentals principles are assisting the process. Firstly, integration is a foremost concern. Secondly, a three-dimensional approach to activities, harmonising their implementation: requested, necessary and feasible activities. Indeed, nowadays, 60% of the work related to utilisation of technologies of information and communication is not yet requested, although necessary and feasible. Thirdly, support and development must be translated into action through adequate structures, promoting cyber-inclusion as well as flexible networks. See Figure 1.

Think globally: integration
Take action locally: requested, necessary, feasible
Express yourself individually: flexible cyber networks

Figure 1. : Three-dimensional approach

We present two examples to illustrate these principles.

1. A blind employee joined our team working on information's technology. She currently realises specific tasks requesting particular skills. Her contribution considerably increased the quality of our services. Indeed, by adjusting the Internet websites of the State of Geneva to the needs of the blind citizen, this employee also helps to make clear criteria of accessibility in computer science and in technical structures.
2. CTI plays an active role in partnership with UNCSTD. Indeed, the CTI helps to create a dynamic situation in which experiences and pilot projects on e-Society in Least Developed Countries (LDC) can be capitalised. Using a strategy for action based on a vision that has emerged from experience and reflection, CTI, and particularly the Technological Observatory (TO) promises to be a strong and reliable partner for the UNCSTD.

CYBER-INCLUSION OF INDIVIDUALS INTO THE E-SOCIETY

To move on to an e-Society, involves developing specific networks, which allow the enforcement of governance favouring human sustainable development. It is fundamental not to develop these networks based on a so-called standardised representation of individuals, but rather on human factors. A maximum of individuality will prevent a new category of exclusion: cyber exclusion.

The definition of exclusion is logically connected to the one of inclusion. Indeed, criteria of inclusion define *de facto* the reasons for exclusion. But this is not sufficient to deal with the issue: powerful majorities, by lobby or by consensus, also play a role in the delimitation of this vague concept. However, besides economical and social criteria, moral and ethics also enlarge the number of constraints in the system.

Nevertheless, every society, by its integrating power, logically also produces exclusion. Unfortunately education, history, believes and moral code reproduce these exclusions. Modern society does not escape this perverse cycle: barbarous exclusions are to be encountered on account of race, health abilities, sexual orientation, nationalism, employment, etc.

If no action is undertaken, our modern life, based on technologies and information science, will have dividing power in two different directions: numeric exclusion and economical exclusion.

Fig. 2: articulation of the cyber-inclusion

The current challenge is not to suddenly eradicate exclusion and injustices from the world, but rather to benefit from the enlargement of

world wide communication and networks to bring certain patterns to awareness. 'e-Society', as a sub-ensemble of common society, is therefore submitted to the same rules: injustice will go on. The main concern is that this new type of society will not add a new type of exclusion, but rather that it will allow a new type of inclusion for those excluded by other criteria of other sub-ensembles. This task is divided into three axes of action (see Figure 2.).

TECHNOLOGICAL CYBER-INCLUSION (TIC)

Technological devices (computers, software, Internet networks, etc.) and legal structures are the gate keepers of the access to e-society for individuals and more general actors.

The integrating power of TIC, however, falls short in case of handicaps. Technologies extend our potential in communication, calculation, programming, simulation, task execution and networked teamwork through simple adaptations on the logistical level. A Braille line connected to the computer is an example of how simple the criteria for inclusion may be enlarged to blind population.

CYBER-INCLUSION THROUGH KNOWLEDGE

Quoting the Organisation for Economic Co-operation and Development (OCDE), human capital is defined as: "knowledge, qualifications, skills and other qualities possessed by an individual". Therefore, the more individuals can enlarge their human capital, the broader and the richer will e-Society be. Contrary to some tendencies in our society to keep back information and keep competency at a low level, the dynamics of e-society turns this around. The most important skills that need universal distribution are information management and human capital management. Flexibility in dealing with information and abstract material is one of the fundamental competences needed to participate in e-Society's activities. Qualification is a practical issue in the economic sphere and/or civil society.

THE THREE-DIMENSIONAL APPROACH APPLIED TO ACTIVITY

Following the principles previously introduced, three types of activities are to be encountered:

1. *Necessary activities*: activities needed by social and economic spheres in order to be reliable.
2. *Requested activities*: outcomes of demands expressed by potential clients, ready to entrust others with a mandate.
3. *Feasible activities*: operational human capital, able to realise requested activities. These human profiles allow efficient performance to realise entrusted mandates.

Fig 3 : The three-dimensional approach applied to activity

The zone located at the intersection of the three circles corresponds to the best balance between the various activities. They consequently represent 'regulated activities'.

HUMAN BEING AS MAIN CONCERN

Social cohesion as well as social capital can result from the cyber-inclusion approach, but only if networks are developed and empowered. Indeed, they appear to be the best environment to let human capital develop through activities and exchange of knowledge and skills.

Networks, boosting human capital, are the answer to subdivided and centralised power related problems. The classical pyramidal (hierarchical) organisation slows down initiative and reduces autonomy. On the contrary, network organisation fosters transversal relationships, and especially vertical and transversal circulation of information. Contained information is a loss of potential. The e-approach prevents subsidiary circulation of information, which divides the monitoring process from the activity process. The raw material of e-Society can therefore be defined as knowledge and skills. Thus, a human and reticular structure delimits the framework of action for e-activities. Inside this framework, autonomy is highly recommended and interdependency is preserved by interconnection and exchange of information.

Human concerns also integrate economical constraints, as trade represents one major key to sustainable development. Thus, extension of human capital, through networks and using a cyber-inclusion approach, should not be perceived as a 'charitable attitude', but rather as the only coldly rational approach to remain competitive in e-business and e-trade.

BIOGRAPHY

Jean-Marie Leclerc is director of the Centre of Information's Technologies (CTI) in the State of Geneva (Etat de Genève) since March 2001. Main milestones in his career are:

- PhD, University of Compiègne, Paris, France;
- Thesis dedicated to the conception of information's systems in decentralised and pluridisciplinary environments;
- International mandates, particularly in the field of development of information science, related to health systems;
- Lecturer at the Neuchâtel's University and various Schools of engineer in Telecommunication and Management, Switzerland;
- Development of multilateral exchanges among public administrations, especially in the region of Neuchâtel (inter-administration project), Switzerland.