

E-DEMOCRACY AND ICT

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Abstract—*The globalization involves not only the exchange of physical goods but also and especially of information and relationships between people. The globalization is the intensification of worldwide social relations. In the globalization era there are cultural mechanisms of integration, a growing consciousness of the whole world, an holistic vision that facilitate the interdependence and the social integration. Citizens of “global village”, by ICT and web 2.0 tools, can interact among themselves, creating a collective intelligence to improve the life quality and public rules. Citizens express opinions and suggestions on services of public administration and they contribute, in a pro-active way, in their improvement and to birth of a new e-democracy. In a globalized context it’s necessary to eliminate Digital Divide between industrialized countries and no, the rich and the poor, north and south of the world.*

Keywords: *E-democracy, Internet, globalization, information society, digital divide.*

1. INTRODUCTION

Technology has changed the way to interact, communicate and our habits. Nowadays the society is based on the development and dissemination of new digital technologies and knowledge. Even companies changed from a Fordist model based on mass production to a post-Fordist model, whose aim is creating value for customers. In the digital society distances of space and time disappear. Through the virtual space we can connect with other people anywhere in the world and in real time. Citizens can connect to local, regional, national and international public administrators. Citizen with his opinions and suggestions can participate actively in public life. Using electronic instruments, we can create a new e-democracy with a greater respect for the environment, energy, sustainability and quality of life.

The article is structured as follows: in the next section we describe the global village while in the third section we present a brief description of collective and connective intelligence. In the fourth section we discuss the implications of globalization. The fifth and sixth sections describe new concepts of Information Society and user generated content. In the seventh and eighth sections we show the concept of e-democracy and the state of art of e-government in Europe. In the last section the digital divide is described. Finally, some conclusions are drawn.

2. THE GLOBAL VILLAGE

Global Village is a term used from Marshall McLuhan, in his books: *The Gutenberg Galaxy: The Making of Typographic Man* [1] and *Understanding Media* [2]. McLuhan describes how the globe has been contracted into a village by electronic technology with an information flow that crosses each part of the world like our central nervous system.

The electrical man of Mc Luhan is a man of worldwide, reduced by new media to the size of a village. Electronic technology has become an extension of human senses and man lives in a planet, where he is actor and at same time observer. In his definition Mc Luhan uses an oxymoron, as he combines two terms that have opposite meaning: the word village expresses something small, while the word global is emblematic of the entire planet. The global village is a rich exchange of influences, a continuous influx of data but at the same time it creates more discontinuity, division and diversity under the increase of the village conditions.

Nowadays the term "Global Village" is mostly used as a metaphor to indicate Internet and the world wide web. The technology reduces physical distance of communications among people of the world in a unified global community. The use of social networking and web 2.0 like myspaces, Facebook, blog, chat, forum promotes the realization of the global village.

The blog, with its archive of texts (*scripta manent*) that could be consulted at any time, is strongly linked to the culture, interests of the village. People can personalize their web pages with personal profiles, interests, messages, conversations, collaborations and links.

Globalization is the intensification of worldwide social relations [3]. With globalization tangible and intangible barriers to the movement of people, things, knowledge are broken down.

The process of globalization appears as intersection of experience, such as intrusion of distance in the own room. Through media processes, the global enters in the daily lives of people, distant events may become more familiar and individuals become members of a global community. The development of social relations, in a context of national

sentiments, can simultaneously contribute to the revival of regional and local identities.

3. COLLECTIVE AND CONNECTIVE INTELLIGENCE

Many people, interacting among themselves, constitute a collective intelligence. For Levy [4] the collective intelligence is the product of the collective memory, collective imagination when people interact between themselves.

De Kerckhove [5] defines connective intelligence as an organized form of collective intelligence. The connective intelligence of De Kerckhove is the practical application of the idea of collective intelligence of Levy relative to digital networks (Fig. 1).

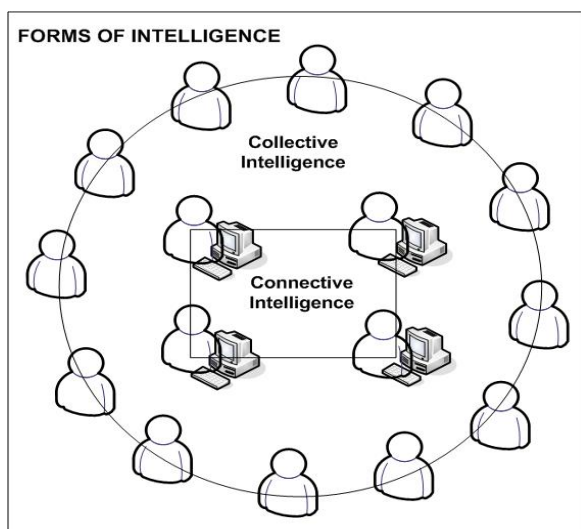


Fig. 1: Forms of intelligence

If collective intelligence is the theoretical component, the reference framework of human thought, the connective intelligence is the part on movement, the dynamic and experimental component. Connective intelligence that multiplies intelligences focuses on connections and relationship.

De Kerckhove insists in the open nature of the concept of connective intelligence compared to the image of "closed container" of collective intelligence.

Nowadays Internet represents a form of extension of intelligence and private memory because millions of people work in groups but without losing the individual identity. Information doesn't reside only in the head of people but also in the network that, through the digital global interconnection, multiplies the knowledge. The network is a form of connective intelligence.

Internet is like a brain that learns continuously; it is the global conscience and the common public space. Everyone can connect and disconnect from this shared intelligence, a "mind always in use", with the advantage of leaving unchanged the

structural integrity. In the global village, each community produces signs, meanings and shared values that contribute to collective intelligence.

4. THE GLOBALIZATION PHENOMENON

Globalization had a prominent role in the history of the 800 and 900 because it is especially in that period that globalization had its greatest diffusion thanks to new technologies.

New communication channels encouraged processes of integration and rapprochement between the various cultural identities respecting diversities.

The phenomenon of globalization is characterized by the confluence of common processes whose nature is not only economic but also political, social and cultural.

The globalization of culture marks our live creating a variety of cultural effects, causing changes associated with a new worldview based on the knowledge that invades all areas of art and literature. With globalization, many people watch the same movies, read the same novels, drink Coca-Cola, eat McDonald's hamburger, browse newspapers assembled technically and ideologically in the same way. It's also true that globalization is probably an irreversible process of modernization where people think in a global way.

The sociologist Ulrich Beck [6] defines globalization as something that goes beyond the barriers creating a growing interdependence between the local realities.

Transnational companies distribute their whole production chain between factories located in different geographic areas. This change in production system has resulted in lowered labor costs and reduced the tax burden

In the globalization there is an economic interdependence that is the condition in which markets cannot be considered separately but as one big global market.

The strategies of standardization are mainly motivated by the need to create economies of scale in order to maintain competitiveness on world markets.

The economic globalization affects also investments and the loss of power of every single state. The movement of goods and production is paired with a capital which is invested in financial speculation. Economic globalization has political consequences as states are no longer able to control the global movement of goods, capital and information.

Globalization also impacts on the ecological sector and causes environmental damage but also encourages a strong consciousness about the importance of this type of problem. The ecological aspect radically transforms our daily lives by forcing everyone to adapt to these continuous transformations.

The process of globalization and relocation of the economy can be described and defined as a complex set of processes that have lowered the regional barriers to the dissemination

and flow of goods, capital and worldwide information contributing to the perception of the world as a local place. From this point of view the international environment is perceived through two dimensions: local forces to adapt to local characteristics and global forces that push towards a standardization. In this respect we can distinguish four types of international environments:

- global environment, where forces that lead to standardization are dominant and local forces are weak;
- international environment, in which both global and local forces are weak;
- multi-domestic environment, where the local peculiarities are important;
- transnational environment, where local and global forces are both strong.

5. INFORMATION SOCIETY

Nowadays, in the digital or knowledge era, we are bombarded by many new acronyms and terms: new economy, information society, network society, knowledge society, digital society, e-government, e-society, e-market, e-health, e-security, e-learning, e-business, e-commerce (Fig. 1)

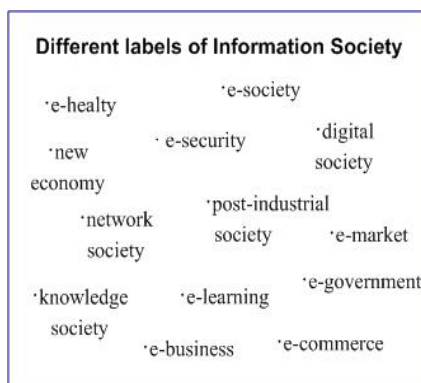


Fig. 2: Terms relative to e-society.

Labels of Fig. 2 represent different terms/products of e-society where the common language is a string of bit. The character "e" before the specific term is the initial of electronic and represents the new electronic technology. By e-health it's possible to manage, in an electronic way, the patient's medical records and interventions. Information Communication Technology (ICT) innovates the processes of learning (e-learning), government of public administration (e-government) [7], business (e-business), commerce (e-commerce), the network security (e-security) and so on.

All these labels evoke historical transformations in the contemporary, post-industrial, digital, knowledge era and emphasize the new vs old technologies of communication where people were mere passive consumers of messages often standardized and defined by the major operators of broadcasting.

The citizens live in a dual system of rules: Public Administration and shared space of the digital society. The digital society implies a different perception of things, a different perception that is much closer to the traditional feel of the arts. The new technologies encourage the growth of a synthetic society where synthetic means communication speed and acceleration of trade communications. Synthetic means also the synthesis of different entities, objects basically very close to the original. The synthetic is against the real object, the reproduction of the object in relation to the reproduction to old traditional technology.

Internet is the new "semiosphere", that as a film, a thin gloss of signs, codes and languages surrounds the "biosphere". Press communication is made of paper, ink and physicality while Internet lives mostly of written communication and virtuality.

The Internet is gradually giving the birth to another world made of "non-places" [8], a surreal world. In the computer screen there is a world that doesn't exist and that we perceive as real. There is an abysmal distance between tangible and intangible places, between the world of knowledge and that of programming. The "digital" is configured as a possibility of representation of reality, but always as a form of mere transmission of content.

When we are immersed in cyberspace, with a reduction of center-periphery, we must not mislead the mixture between real and virtual.

Internet is a speed extension of the human capacity to perform the activities. It is possible to save time by eliminating the space. Every time we delete the space, we save the time to cross that space. But if we send to person a message, and he/she don't receive it in four hours, this period of time isn't real time. This extension of time is a different approach how we distribute and organize our lives.

New information technologies and communications are polarizing the world between connected individuals and those excluded to connection. Rifkin [9] says that the access to social networks and new economy become discriminating of the current and future welfare of citizens. This exclusivity is creating parallel worlds where rich people have income, education and connections, have an immediate and convenient access to information. When individuals of these two worlds live and compete, the advantage of being connected crush other people. The non-connected people are excluded from the global conversation.

So the Internet opens up new opportunities that generate benefits not only for the economy and business growth. Indeed not only businesses but all citizens can take advantage of the benefits of new ICT. In fact they can use a tool through which they can actively contribute to improving society.

In this regard, Clay Shirky uses the term "cognitive surplus" to refer to the possibility of all people to use their free time to

help improve the world, thanks to the intelligent use of the potential offered by the Internet and new technological tools.

Apart from the most famous - such as the possibility to enrich and improve the online free encyclopedia Wikipedia – there are many other opportunities offered by the Internet, some of which have become particularly popular.

Shirky cites, for example, the movements born from groups created on Facebook to make the Indian women free to attend the bar in India, those created to organize the protest in Iran against the presidential election map, or the wiki maps created by a Brazilian professor to report crimes committed in his country.

With regard to Italy, one of the most famous examples is the movement Goodbye Pizzo, organized by entrepreneurs and traders of southern Italy. Thanks to the Internet they have united to denounce and combat the phenomenon of Mafia extortion.

These and other examples show how the Internet could actually help change the attitude of people towards society and its problems, which can be more effectively addressed and combated with the joint contributions of many individuals, clans together via Internet.

It 'so important that everyone become aware of his potential and learn to recognize the value of this cognitive surplus, which could usefully be directed towards improving the world instead of being wasted on unnecessary activities.

6. USER GENERATED CONTENT

Content production is no longer the prerogative of the media centers, press and traditional producers but everyone can participate in the discussion and produce content by simple platforms.

This phenomenon is described with terms like User Generated Content (UGC) [10] or Consumer Generated Media (CGM) [11]. These terms were born in 2005 in web publishing and new media sectors and they refer to the material available on the web produced by users rather than by specialized companies. UGCs websites pages or social networks where individuals can create something and add value on the work.

Users for generating contents use different tools: digital video, blogs, podcasts, wikis, Flickr, YouTube, Second Life, Facebook, Wikipedia (Fig.2).

These social media produce and distribute contents (text, video, audio, etc.) through the network at low cost and everyone has access to multimedia communication space. The production of these collaborative contents and the exposure to contents produced by all people are changing our global society.

The exponential growth of web content produced by UGC of the Internet and new online virtual communities have produced a significant change in the global system of communication.

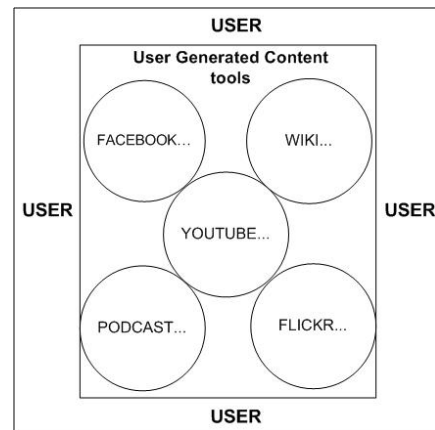


Fig. 2 User Generated Content

The new communication, system, where users are involved in the content production, is named mass self communication. This is a new form of socialized communication [12] that flows from the bottom and is built on web 2.0 tools, peer to peer technology and multimodal communication. It's a mass communication because potentially reaches a global audience. It's a kind of autonomous communication in the generation, management and selection of information.

7. E-DEMOCRACY

The information technologies, mainly web 2.0 tools, support the realization of “global village” of McLuhan. The ICT promote opportunities for Electronic Collaboration and Public Democracy and partnership and collaboration between agencies, non-governmental organization (NGO), business enterprises, civil institutions, and private sectors in governance.

Every person of the world lives in a big village and can, with his opinions, actively participate to public life. The electronic worldwide exchange of ideas can promote the advent of a participatory global democracy (e-democracy) [13] (Fig. 3).

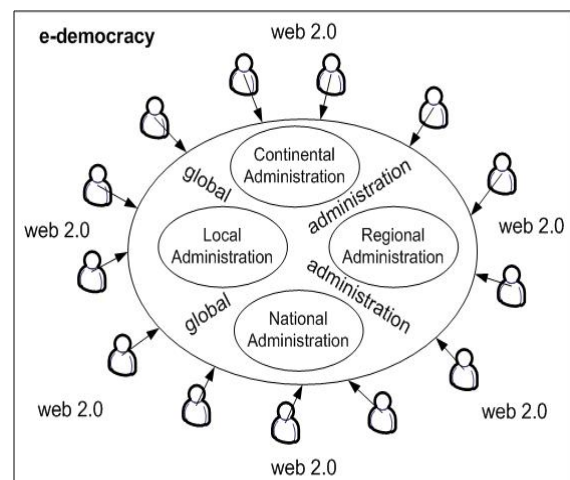


Fig. 3: E-democracy

E-democracy, with the use of new information and communication technologies, promotes the access of citizens to life and democratic processes. The restructuring of the medial space and the dissemination of new media has facilitated the strengthening of democracy: public more informed, more civic participation and more debate. Groups of citizens are organized around interests, preferences, common habits.

The e-democracy focuses attention in the following points: active involvement of people, redesign of new internal workflows, creation and sharing of a new knowledge, definition of metrics to quantify the results.

For the fully creation of an e-democracy, in a global context, it is important to create an experimental laboratory, with public and private employees, citizens, businesspeople, where they can experiment pilots' services. The approach to pilot services allows a test phase, that could help to evaluate the results, make the necessary changes and improve off and online services.

The civic network of Milan (www.retecivica.milano.it) and civic network Iperbole of Bologna (www.comune.bologna.it), for example, operate in this context where citizens work, interact, project and decide together to experiment new services.

A group of people exchanges ideas, opinions, experiences and realize projects on a shared electronic space. These groups of citizens are available to create an electronic democracy and to encourage the creation, in a collaborative modality, of new contents and therefore of new knowledge.

To this end it's possible to use groupware and web 2.0 tools (chat, forum, wiki) (Petrik, 2009), new technologies that support the working group. Thus, a bi-directional channel between user and Government is established and a process of co-creation of contents is realized.

The transition to electronic delivery of services in government not only involves changes to the systems, procedures and processes of services but also in the way to interact with the government.

We can identify different types of e-government: G2C (Government to Citizen), G2B (Government to Business), G2G (Government to Government).

The G2G system improves the efficiency and effectiveness of public actions and implies an indirect benefit for citizens and entrepreneurs.

Government itself must stimulate the birth of these virtual communities to increase communication and collaboration. It is well known, in fact, that the advent of web 2.0 promoted the birth of a sharing philosophy and stimulated conversations and exchange among people.

Users exploit web 2.0 tools for both expressing their opinions about a product/service and suggesting solutions to improve it.

For the Central and Local Government, it is very important to capitalize citizens opinions both to the improve their services and to reinforce user's loyalty.

In the context of e-democracy, e-government offers, in online modality, services of quality to citizens and enterprises to improve relationships with them.

The international experiences show that the success of e-government requires innovative strategies to change the government. It is necessary to accompany the investment in technologies with strong innovative organizational changes. The e-government supports the radical change of public administration with the creation of an integrated system, where the diffusion of new technologies represents an opportunity to maximize the competitiveness of the country and the improvement of the quality of citizens life. In the e-government, we could see a continuous development, a culture-oriented service, an integrated process with the transformation of organizational systems, a attention to human resources and simplified procedures. It is important to improve the efficiency of Global Public Administration, achieve a strong organizational and managerial change, encourage the cycle of digital convergence between administrative processes, public services and new technologies. Citizens demand better services, better security and more democracy while business companies demand less bureaucracy and more efficiency.

8. DIGITAL DIVIDE

Globalization, supported by web technologies, offers prospects for progress and benefits: increase of trade with more profits, investments in expansion with highest levels of prosperity, increase of quality of life and decrease of costs.

Economic globalization creates problems not only in less developed countries but also in industrialized countries, with the rising of unemployment due to delocalization and technology [15]. There are negative aspects regarding the environmental and ecological future. The growing scientific and technological innovation has characterized economically advanced countries causing catastrophic damage to the environment. We are also bombarded by the phenomenon that the famous American psychologist James Hillman calls "poisoning communications and information technology" about the surplus of information. People, from one side, are the target of repeated large amount of information, not just advertising, and on the other side they live with the need of acquiring information to remain updated with the evolution of society. Another injustice is also the digital divide of global village (Fig. 4).

In the Global Village not all people are equally connected to Internet and people without web access are excluded from global news and from participation to online communities and e-democracy. Communication media can also be used to divide people within the sphere of online communities in fragment communities and to segregate themselves into geographic and special interest groups.

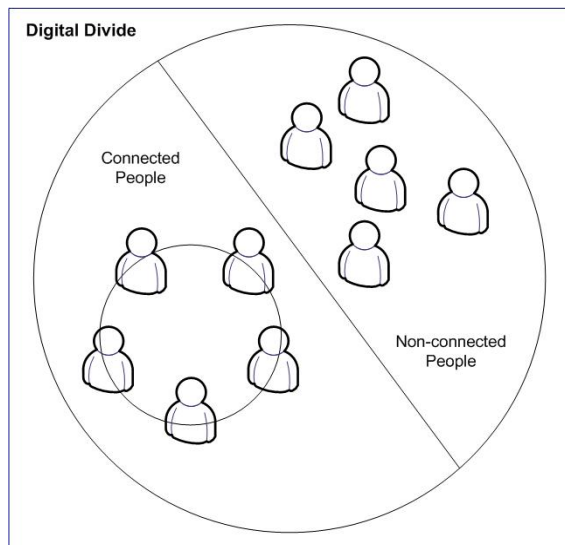


Fig. 4: Digital Divide

In the global village we must avoid the birth of strongholds versus isolated islands outside power centers. Their inclusion would give a voice to those who are excluded from the logic of development because they are considered a sort of department store from which to release raw materials for the West.

African countries, where the subsoil is rich in resources, could constitute a valuable reserve of knowledge. In Africa there is a specific determination, spirit of sacrifice and great desire to learn.

In this context, we must consider the anti-globalization movement who opposed to the international integration of production or against the neoliberal economic policies. Synonyms for movements anti-globalization are: new-global, anti-globalization movement, antiestablishment, the people of Seattle, global justice movement. Non-governmental organizations, groups of individuals of diverse origin belong to this movement.

9. CONCLUSIONS

Globalization in the past has involved only the physical goods while now it focuses on information and the movement of intangible assets. Customers and citizens can express an opinion on a product/service and can contribute, in a proactive way, to their improvements. Citizens, by web technologies, can actively interact with other people and with public administration. Citizens can co-operate in formulating norms and rules that regulate the public life. A new form of e-democracy is emerging. Web 2.0 tools and Information Communication Technologies support the new democracy. In this way public administrators listen citizens to improve the quality of life. We must ensure that all citizens can equally have access to these technologies.

To make a real and effective system of e-democracy, however, certain conditions must be met. Too often, in fact, the role of technology is emphasized and the importance of cultural and managerial/organizational aspects is undervalued.

This means, for example, that in order to achieve an effective transformation of public administration and to develop an effective communication relationship between citizens and government, providing the public institutions with advanced technological systems is not sufficient.

The ability of these technologies to generate real change, to improve the administrative system and to enhance the quality of service provided to users depends, in fact, on the ability of institutions to profoundly change the way they work and organize their activities.

Without this change, the technology could not produce any result, and it is likely to further complicate the functioning of the institution, as well as generating unnecessary cost increases.

It 'also important that technology is conceived as a means and not as an end. Technological innovation is indeed important, but it can encourage a real change in the relationship public administration-citizens only if both public administrations change their culture, understand the value of dialogue with citizens and learn to listen and to answer to their needs.

So the government must adopt a new attitude, more user oriented. The satisfaction of citizens' needs should be considered the main objective and technology should be used to maximize the quality of services.

Without this cultural change new ICT may not be the means to maximize the satisfaction of the needs of the community. They risk becoming merely an end, without any real usefulness and therefore ineffective in promoting the launch of a new relationship between citizens, governments and administrations.

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