Knowledge Transfer in Virtual Communities

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ABSTRACT

Increasing development of information and communications technology, continuously transform how the world transmit, receive and manage information. Knowledge transfer switch from classic source - passive receiver to a more complex model, where each receiver can become a new source that regenerates and is thought to enhance the information received by adding its own added value and further resending it to an enhanced group of new receivers, often bigger than initial group. A current study performed jointly by State University of Milan and Facebook revealed that the degree of separation between any two people fell through six levels (as Stanley Milgram's theory, 1960) to less than four between Facebook users, shows that new patterns of social communication tend to transform humanity from a sum of individuals in a common consciousness, able to act in the common interest of humanity.

KEYWORDS: *Knowledge Transfer, Social Communication, Open Source, Creative Commons.*

JEL CLASSIFICATION: *O33, A14*

INTRODUCTION

The idea of the universal access to research, education and culture is achievable with the help of new technologies, but the current social systems and the legal framework which governs them do not always allow the application of this idea into practice.

People from all the strata of society should have equal chances as far as the access to information is concerned. The open access can satisfy this need by making available online in regime of untaxed public access the scientific and educational literature available so that anyone who is interested can read, download, copy, distribute, type, search and make references to the full version of the scientific work and use it in any way they want without being worried about the financial, legal or technical limitations beyond those regarding the access to Internet itself (Budapest Open Access Initiative, 2002).

Equity is one of the fundamental, unwritten principles of using the Internet, it eliminates the communication barriers imposed by the physical, economic or social borders, by offering its users freely and equally present and future facilities.

With it also appeared problems related to the lack of responsibility in the free use of the facilities offered by the Internet. In the field of presentation of information the reliability of the source can be doubted by the fact that most of the times nobody takes responsibility for

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what is published on web. The lack of security of data can make it vulnerable to viruses, to those who want to break codes, to those who seek to make fraudulent operations.

Moreover, the success of the activities based on Web 2.0, the possibility of accessing information not only to read it, but also to modify it gives reasons to worry to many people concerned. The laws that traditionally protect the copyrights appeared long before the Internet and pose serious obstacles to the sharing model specific to networking: copying, adding, editing and modifying the content of the source and the publication under your own name in the network through the tools of environment 2.0.

In comparison with the classic approach, the vision of the universal access to information can materialize in a formal framework supported by nonprofit organizations such as Creative Commons, which aim to build and develop a public infrastructure with **free access to information**, based on the free consent of the authors of works in all the fields to make their works available to the general public, creating that way the first public universal library, a potential successor of the famous Library of Alexandria, which signifies in its age of glory the cultural and scientific patrimony of the whole mankind.

1. INTERNET – THE SPACE OF THE NEW COMMUNICATIONAL REALITY

The human activity in general is based on the transmission and use of information and knowledge. Traditionally it can be transmitted orally or in writing, and its production and dissemination is the object of activity of different institutions between themselves: from school centers and research institutes to publishing houses and mass-media (Popescu, Constantin & Menda, 2010).

The more and more profound development of information technology and communications has radically transformed the way in which mankind transmits, receives and manages information. In 1970s, the communications by cable and satellite privileged the synergy between telecommunications and radio and television channels, the 1980s marked the junction between software technology and telecommunications technology in the computer networks, followed in the 1990s, by the extended convergence of all those technologies by virtue of the common objective of their applications, which is the information in digital format. (April, 1999).

Today, more than 20 years from the appearance of the Internet many people feel that no other invention has changed so much the way in which we behave, we live and interact with each other.

The Internet has created a new universal space for the dissemination of information, for documentation, research and learning. The last two decades were witness to the explosion of the Internet which evolved from a small network which connected the men of science to the widest forum of exchange of ideas that mankind had ever known.

It provides a new environment which combines the topicality and spontaneity of the new technologies with the deepness and scope inherent in the communication based on written text. Thus appeared a new possibility to communicate and socialize, to establish contacts between people with common interests. The interest can also be expressed today in a localized group in a virtual niche of interest in the space of the new communicational reality. In addition, it opens a new gate to tele-school, tele-medicine, electronic commerce

(e-commerce, m-commerce) and new business models (services of access to network, webpage hosting, transactions with internet domain names or virtual libraries).

The Internet is a system of interconnected networks, which facilitates the services of communication of information and thus extends the possibilities of work of each system connected to the network. It can be considered a huge library which holds various information's about any subject. At the same time, it is the most complex learning tool in the world, a means of exchanging resources, a means of relaxation, of communication between the users. The applications of the Internet are numberless: first of all, the display of more or less static information in the form of text, images, sounds, video-clips (the so-called web pages), then the electronic post (e-mail), the transfer of files, chat, telephony and telephony with image by internet, television by internet, e-commerce, public surveys, the environment of dissemination of news, interactive games by network, banking operations and many other.

The most popular and widespread service of searching for information is the World Wide Web. Through web pages, the information is searched for in the whole Internet space by using not only key words but also the system of links between information. This system of links turns the Internet space into a "spider" web of information, interconnecting huge collections of documents from the whole world, which are on Web servers.

We can already speak of generations of web services: Web 1.0, Web 2.0, Web 3.0. While the generation of services Web 1.0 has as object static informational contents, the new generation Web 2.0 offers the possibility of generating contents in a regime of collaboration of weblog type ("blog"), wiki etc., privileging the formation of virtual communities and social networks.

Web 3.0 represents a possible evolution of the current paradigm 2.0 in which the individual and voluntary contribution to the development of the content with public or private character is surpassed from the point of view of importance and relevance by its individualization and personalization depending on the historical profile of the Internaut. Paradoxically, although many people consider it a natural evolution and an adaptation to the survival in virtual infinite cybernetic space, the evolution 3.0 can work as a two-edged weapon. Thus, apart from the opportunity of increasing the relevance of context for the user, the occurrence of the multiple risk of his transformation and isolation from the global context of information is inherent. The problem of creating deformed optics strictly individualized by truncating the global context as source of inter-ego conflicts is one of the major challenges that virtual community and social networks have to face in the evolution of the concept 2.0.

Challenges 3.0: Also called semantic web, due to the contextualization of the content to the user's profile, web 3.0 poses the following challenges:
- ✓ Human errors (wrong content created either deliberately and used as a manipulative tool or out of ignorance) and the abuses of systems (facilities and capabilities implemented without judgment, which jeopardize the privacy and even the physical security of the user):
- ✓ egoism: "*why should I waste my time training the system what to train me next?*" Web 3.0 has no exclusive academic purpose. Once proven useful, the tools 3.0 will be used just like the tools 2.0 by anyone who needs them. In other words, publicity must follow the human need and not the other way around.

2. VIRTUAL COMMUNITIES AND SOCIAL NETWORKS

A qualitative leap regarding the applications of wide spread on the Internet appeared in 2004 - 2005 and was called Web 2.0. The blogs and sites such as *wikipedia* have shown that the web can become an environment created by users. Practically, it is considered that with the appearance of blogs, *wikis*, *RSS feeds*, the technologies such as *AJAX*, the websites created by thousands of users, we enter a new age in which the transmission of information is reinvented.

These websites "*comprise the power of the web to gather collective intelligence*" (Oreilly, 2007). They live on the collaboration between people: Amazon involves its users in book reviews, Wikipedia invites its users to become authors, eBay asks for comments regarding the credibility of sellers and buyers, and SourceForge.net promotes the open source projects.

Web 2.0 represents the Internet of the next generation, an Internet capable of giving the user all the information that it is assumed he needs. Maybe the real meaning of the concept web 2.0 is the socialization of information and the communication in real time by means of blogs, social networks, podcasts (online journals that can be downloaded on portable player). The user is in the center of attention, he creates the "age of information" and this evolution prefigures the appearance of more capable and more intelligent web services, web 3.0.

Probably the characteristic feature of Web 2.0 is the fact that the users are involved in production and consumption processes as they generate and browse the online content, label and write blogs, post and share. This led to the assuming of a more and more active role of the "consumer" in the "production" of content (Thrift, 2005). Indeed, the ordinary personal details posted on profiles and the links made with on-line "friends" become the content of Web 2.0. The profile, the archive of information from the day-to-day life of individuals attracts people in the network and encourages them to make "friends". In case of http://www.xuqa.com the popularity of network members plays a central role and is expressed under the form of online popularity contests where, as the site informs us, the users "*socialize and compete to become the richest and the most popular game player*".

Wiki is a web application which allows the users to get involved in the addition and change of content. A wiki is "an expandable collection of interconnected Web Pages, a hypertext system for saving and changing the information, and each web page can be simply edited by a user in a browser, by using forms". The use of wikis also implies knowing certain risk factors: the reliability and inaccuracy of the content or the presence of radical points of view because of the fact that there is no strict control of the information.

A well-known and valuable application is Wikipedia which managed in its five years of existence to radically change the concept of encyclopedia. The content is freely accessed and can be updated by any user by completing articles with information. Over 10,000 voluntary experts check and correct afterwards the mistakes or inaccuracies. In 2005 a study carried out by the magazine "Nature" compared the mistakes and wrong information that appeared in Wikipedia with those from the prestigious Encyclopaedia Britannica, and the conclusion was that both of them contain the same percentage of mistakes. (Nature, 2005).

Folksonomy (Wander Wal 2007) is a classification system in collaboration which uses key words called labels freely chosen by the users. While a taxonomy – from the Greek word "taxis" – organizes the resources according to a predefined framework, the organization of a folksonomy is done by folk, by people who determine it based on their own interests, culture, vision on the world. The result is that labeling *facilitates lateral search.* We can surf in unlinear directions from one page to other pages with similar information or when we find such pages, we can label them to help other users to operate the same connections.

The origin of this *social bookmarking* is del.icio.us. This site allows its users to save the addresses of their favorite sites, to label them and make them available to all the other users.

In Flickr it is the same: the photos can be sorted and presented and can be searched for by using labels. It is identical to YouTube, the well-known and widely used video online folksonomy archive http://www.youtube.com. Nowadays, YouTube hosts over 100 million downloads a day and it got so far that it was suggested that it could be an viable alternative to cinema or television.

Social networks probably represent the most important application of Web 2.0, especially as the number of users (hundreds of millions) continues to grow and comprise a wide range of other phenomena of Web 2.0. The most popular are Facebook, Twitter, MySpace, Linkedin, Blogs.

The social networks can be considered the virtual communities which generate content by the contribution of participants. They have a powerful component of socialization, its characteristic being the common interest of members in a certain subject. By an online application which facilitates the interaction of people of different nationalities, traditions and visions, by uniting them through a common passion, the network expands or gets consistency and popularity, becoming useful if you know how to use it to your best interest.

The users of social networks create profiles about themselves, display photos, information about their lives, opinions, their workplaces and so on and they "befriend" other users. For instance, the social networks are used by persons who know each other from university or the workplace in order to organize meetings, to discuss events that happened during the day and so on. The users also establish new virtual relationships which are then transferred into the real life. This generates an interesting convergence between the virtual world and the real world. The relationships and friendships surpass the virtual and real spaces as the users communicate with friends from the real life through social networks and other applications of Web 2.0 (Wellman, 2001). The students who participate to the courses of the same college, for instance, use the social communities to discuss about courses, lecturers, organize social events and exchange photos from certain meetings.

The cultural impact of the new social networks was important from another point of view as well, related to the increase in the popularity of certain artists and the appearance of new associations between music artists and their audience (fan-clubs).

The economic impact of social networks should be analyzed starting from the fact that they are considered compulsory tools for any marketing strategy. The consumers of today combine and use exactly those tools that satisfy their social needs. The electronic tools make them even more active from the social point of view. They get more and more

involved in what Euro RSCG Worldwide calls "trialogs": multi-directional exchanges of ideas and opinions between consumers and brands.

Euro RSCG[4] identifies five trends of online socialization:

- ✓ Social media is now an essential part of any strategy of communication between the countries in which digital media is accessible to citizens and consumers.
- ✓ It is impossible to predict how the social media will transmit each piece of information. Since the traditional media went online, the communication flows from some media to the other media and the consumers become messengers.
- ✓ The Web is global, but its power manifests at local level. Here takes place the convergence between online and offline, each completing the other.
- ✓ Social media allows the consumers to easily share their opinions through one channel or another. But the users wait for prompt answers and various benefits: their question is always the same: "What do I get out of it?"
- ✓ The more people interact online without other offline contacts, the more inclined they are to extreme behaviours. It is important that the online environment is combined with the offline environment.

Some IT experts feel that web 2.0, from the technical point of view, represents an evolution, but from the social point of view, it is a harmful phenomenon. **The strengths** would be the continuous updating of information, its abundance and accessibility, and the **weaknesses**, the fact that the information can be easily manipulated and does not mean quality, but quantity; that the Internet has turned from an environment full of useful information into a place where subculture is promoted… They consider it a term of fashion, a marketing tool by which some people got rich overnight.

Other experts say that Web 2.0 means that "you don't exist if you are not on the Internet", the user has to create everything (Wikipedia, YouTube). They consider that the idea of free access to the variety of databases and online applications is fascinating, and Web 2.0 is a revolutionary phenomenon especially because of the change of attitude regarding the place and role of users of information: the informational content is created by users, they bring news, links to articles and they write comments, they are those who do everything.

3. IMPLICATIONS OF WEB 2.0 IN EDUCATION AND RESEARCH

The information and communication technology (IT&C) influences decisively the appearance of **a new way of production, transmission and valorization of knowledge**, a way of training and learning – electronic training (network learning), which can lead to the appearance of a new educational system.

The elaboration of an Internet – educational system will be a laborious and long-term process which implies an interdisciplinary team of "providers" of specialized knowledge and information who actively cooperate with teams of psychologists, programmers and experts in IT and telecommunications.

The electronic training can become the solution to the training and communication problems generated by the new economy. Computerized training refers to the training process based on the exploitation of information dissipated in a network of data (assisted by the computer and/or carried out on the Internet). The process started by being used in the training departments of large companies, in universities and schools as a supplement to the traditional methods of training.

The Internet does not entirely replace the teacher, but transforms his mission: teaching others becomes a direct training, an activity which facilitates learning, by using new tools: video-conferences, web pages, interactive educational software, E-mail etc.

The classic models of learning cannot rise to the height of the challenge that the new economy launches in the field of training. The multi-media means allow a better understanding of the subjects taught and can improve the traditional training methods and materials (without taking their place) by:

- The electronic format of the course supports and didactic materials which allow by their enclosing in virtual libraries an easy access that can be easily quantified compared to the attendance of students to classes;
- Presentation of courses in a stimulative form which captivates the students by using voice-video-data transmissions. The university courses can be seen and heard at the same time from the same amphitheater by the students of several territorial centers;
- The didactic material made in a modular form, being divided by "objects" which are extracted from a database and presented together based on the results of an evaluation test. The result is a personalized learning path: the students receive only what they need and study in their own pace;
- The use of electronic post as a vehicle for the immediate feedback of the teaching process contributes to raising the quality of the pedagogic act, facilitating at the same time the clarification of aspects that are less highlighted in the teaching stage. The reduction of the answer time allows an immediate interaction between the subjects of communication, the storage of the history of correspondence and its distribution in a discussion group;
- The specialization of the educational act by using the interactive educational software both in the field of entrepreneurial and managerial education and in the financial banking field and public administration;
- teachers, mentors (tutors) and experts available on-line to provide consultations and information to the students/trainees, to answer questions and facilitate discussions. The possibility of examination at a distance and the originality of the virtual aula are a true novelty which allows the fluence of circulation of knowledge and direct communication: teacher – student, student – student;
- the creation of online communities for mutual support and exchange of information, for research and knowledge.

The discussion forums focused on themes imposed or not allow the affiliation of practically unlimited number of subjects divided by communicational barriers (geographic, temporal, linguistic, cultural, etc.).

The promotion of access to information and knowledge by the traditional library can be replaced by the "facilitation of knowledge" as the basic preoccupation of libraries 2.0. The library in its capacity of meeting place, space for informal learning, cultural activities and events is today under the pressure of digital media and changes in the behaviour of users.

The library service 2.0 will have to operate in accordance with the expectations of the current internet user: free unlimited access without any kind of barriers to any type of information, from anywhere and at any moment of the day. The resources of Library 2.0 should be much wider exposed. They should be available to open Internet, accessible to search engines and be enriched with new applications and services built by the library.

The Library 2.0 asks the question of creating a unique, global catalogue, considering that the information provided by the multitude of local, regional, national systems that run on different software platforms is not sufficient. The Library 2.0 facilitates and encourages the involvement of the staff of libraries and communities. Just like in all the spheres of activity, the techniques, technologies, tools or innovations are valorized at the highest degree possible. Just the same, the libraries that have information as object of activity need to aim to use the tools and means of information made available by the Internet and the new technologies.

In the opinion of Michael Casey, who launched the concept of *Library 2.0*, the libraries are at a crossroads and have to elaborate a strategy of adaptation in order to apply the elements of Web 2.0: "of course, the first step to Library 2.0 is training librarians how to use the techniques of the new web, especially to attract the youth. "A thing we do not want is that someone who enters a library and asks for *Flickr* or *Second Life* should be welcomed with a puzzled look" declared to *Wired* magazine the director of a library in Melbourne. In this direction we can do something practical by initiating training programs for librarians. According to this concept, the libraries should be the heart of "democratization of information" – by supporting the demolition of the walls surrounding it and offering the possibility of getting the population and users involved in this process.

The effects of using these new technologies on the individual are different from one person to another, depending on the psychological profile of each person. In its multiple forms, the ongoing training system by remote-education programs offers a multitude of advantages for beneficiaries and "providers".

A **personalized training experience**: the options of individual study allow the trainees to evolve in their own pace, to choose a certain type of content and means of provision depending on their own preferences and to assembly modules of content that meet their own needs.

Low costs: universities and companies can reduce or even eliminate the traveling expenses for training, eliminate the expenses with the spaces designed for training and reduce the time spent by teachers/experts hired out of office and current duties.

Access: the users can have access to content from any place where there is a connection to the network. This means that an almost unlimited number of persons can benefit from the content of electronic training, and on the other hand, the trainees are not constrained by time lags.

Learning in collaboration: the training in network allows the exchange of information and mutual support between participants.

Equity: regarding the possibility of study, quality and topicality of the knowledge transmitted simultaneously to the group of interest.

Responsibility: following notes, tests, evaluations and certifications is done automatically so that all the participants (trainees, authors and content owners) can be held responsible for their own assignments in the training process.

Although it offers extraordinary possibilities, the Internet also poses problems: how can an organization benefit from the advantages of Internet before competition? How can it fill the

gaps left by the traditional methods of training the employees? Also, when a manager deals with fast technological development, with the elimination of barriers in many fields and with the pressure of globalization, sooner or later each manager has to ask himself the question: "Are my employees and those who attend training courses able to keep up with change?"

The challenge for managers is to make sure that their employees have the capability to deal with changes instead of falling victims. The employees must have the capability to quickly assimilate new skills and assimilate new information, but the traditional methods of training are not sufficiently flexible to meet the larger and larger lags in the field of skills and knowledge.

Among the disadvantages there are: dependence on the computer; bad time management for the persons who get lost "in the ocean of information" without finality; the difficulty in the evaluation of the reliability or accuracy of multiple sources of information for the same subject. For the future, some authors draw the attention to the danger of equalization, if we renounce our mother tongue in favor of English which is mainly used on the Internet, the cultural differences are in danger of disappearance; nobody wants this, we will not renounce the national specificity, it has to be preserved just like the cultures of different peoples.

It will be a long time until the use of the Internet becomes a habit for all the individuals of the planet; the revolution has been opened by the use of the telephone; the Internet adds globalization, independence of time and culture; the future numbers are still unpredictable.
The access to Internet and the formation of skills of users are conditioned by economic, educational, cultural and personal aspects. The capacities and the infrastructure of the network are developing with great speed in many countries. This phenomenon serves as background for the evolution of activities in three economic and social fields and education has its gains as well.

It must be understood that having a connection to the Internet does not guarantee the capability to use it. The distinction between access and use (determined by the cultural and informational profile of individual users, which depends on the efficiency of the educational system) is one of the quantitative and qualitative barriers on the path to the generalization of informational society. The quantitative factors include the Gross Domestic Product, the infrastructure and the tariffs of a country. On the other hand, the qualitative barriers are less visible, being related to language, the degree of alphabetization and the appetite of users for certain content.

The formation of skills of Internet users also involves, apart from assuring the conditions of carrying out such an activity (technical, economic and psychological motivation of participants):
- ✓ the interactive presentation of the subjects of introduction to the use of Internet with deep focus on practice;
- ✓ the level of presentations has to be adjusted to the type of audience (computer skills, professional qualification, etc.);
- ✓ it is necessary that the lessons are doubled by individual exercices for trainees, with the assistance of specialized persons;
- ✓ the possibility of access to the Internet, after the graduation of the course.

In order to be able to increase the level of "global interconnectivity" and to enjoy the benefits of digital revolution, we must first admit that the lags from the developed countries are not just a problem of infrastructure, but also regard the general cultural level of the population; or there is to the same extent a knowledge lag and a technical standard lag.

4. WEB 2.0 FOR RESEARCH

The service Web 2.0 is about to bring change in scientific research as well by the infrastructure of services of access to primary scientific data and to forms of collaboration based on networks. Since it is relatively easy to operate a website such as an electronic magazine, many researchers and men of science became active in this field. With the aid of software tools and editorial systems which organize the processing of manuscripts from proposal to the review process and final approval, they set up independent communication platforms for their communities.

According to the vision **E-Science** (Enhanced Science) the men of science and researchers will be able to form virtual organizations related to a project, based on tools and services necessary for cooperative work, media integrated procedures for "informational exploitation" and the access to heterogeneous and widely distributed data collections.

The Internet has also revolutionized scientific publishing in the research field. For the first time in the history of mankind, now a person can make available to the general public a piece of information with low costs, in other words, to publish it. These publications can be found without costs with the aid of a search engine. But this process does not involve quality assurance in any way, and the decision regarding the accuracy of information is left to the reader. Yet, in the scientific field, most of the times, the experts are in the position to evaluate the quality of a magazine.

The following list offers a primary evaluation of different approaches regarding quality assurance which can be possible or are already used by magazines with open access. It does not claim to be complete; especially that electronic publishing allows a wide range of variations. (Bodenschatz, E., Pöschl, U., 2008)

- **Peer review**. In case of this well established model based on editors and the evaluations of anonymous experts, the articles are published only after a specialized review and a private revision process. Yet, sometimes, the original manuscripts are published electronically as the so-called "pre-prints" before the conclusion of the peer review process. The classic model is used by most of the magazines with open access.
- **Collaborative Peer Review**. The process of publication and review takes place publicly in two or several stages starting from the preprint or from the discussion stage. While the original manuscripts are reviewed by the well-known or anonymous editors and reviewers, the readers can offer additional comments. Having the approval of the editor, the author has the chance to publish improved versions based on these reviews and comments.
- **Moderation.** The manuscripts proposed receive a formal review from a moderator. The original manuscript is published only if it has no major flaw. A more careful review is left to the authors who can submit improved versions, if they want to.

- **Automatic evaluation.** The publication of the manuscript continues without any quality assurance. An automatic evaluation based on quality criteria comes later on, for instance, the number of quotations, the number of links to the page, the number of downloads, the evaluation of authors in time, etc.
- **Evaluation done by readers.** The publication of the manuscript continues without the assurance in any way of the quality of the manuscript. It is followed by an evaluation of the readers who can make comments. These comments are published with the manuscript.

In practice are used a wide variety of combinations of the models described above.

Apart from the problems related to quality assurance and the accuracy of circulated information, the **copyright protection** also has to be adapted. The Internet offers new opportunities for the distribution, sharing and re-use of the creative content. A large part of this content is under the protection of copyright. The copyright protects a work as soon as it exists, by offering its creator a set of exclusive rights over the reproduction, translation and public distribution. The fact that most of the information accessible on the Internet is free (Wark, 2006) feeds the tendency to counterpose to the intellectual property the alternative of new economic judicial regimes of community type:
- ✓ Creative Commons licenses with open access for digital contents
- ✓ Open source for software

Creative Commons offer a set of license options freely and flexibly selected depending on the level of protection and freedom that an author or an artist wants to have.

Creative Commons cover a wide range of creative content: audio music, sounds, discourses, images, photos, illustrations, drawings, videos, films, animations, text, books, essays, websites, blogs, educational materials, lesson plans, textbooks, manuals, presentations. Several million webpages currently use Creative Commons licences. Some well-known websites that use contents under the CC licence include photos (Flickr), web archives and multimedia resources (Internet Archive), MIT Open Courseware, an initiative which offers online educational materials from the Massachusetts Institute of Technology.

Open source is based on the tendency to *opening* from the software industry, which had an important success in the last years. The software model *open source* spread relatively fast and occupied a significant position on the market, which indicates that an open strategy can be a viable alternative with efficient economic results.

The initial force of propulsion of *open source* software was the liberty to build starting from the source code of a new operating system made public by the creator himself with the purpose of its subsequent development based on volunteering and to public benefit. The idea spread fast in the software industry and not only. We could say that it was relatively fast taken by the academic environment which has the role of promoting universal access to education, research and culture.

The motivation of the academic environment starts from the need to prove its *impact* and *visibility in society and to justify its funding.* The more quoted and used research and studies are, the better it is for professional carrier and the future funding possibilities of the institutions and, in general, for the global benefit of science and society.

CONCLUSIONS

More than any other technological tool, the Internet has the potential to allow the emerging countries to take the leap to informational age. In the current dynamic economy, the countries and organizations that implement training on Web offer the users the possibility of valorizing change to their advantage.

The training in network assures responsibility, accessibility and opportunity. It allows people and organizations to keep up with the world economy which now evolves with the speed of Internet. If the information were to be translated by power, the educational Internet could be the fastest solution to align to the same standard those who are traditionally behind; otherwise there is the major risk of exclusion from the "planetary village".

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