

POINT OF VIEW

New Economy: the future is in the net

Day after day, our communicating through the Web is changing the way we live. Without realizing it, in just a few years we have gone from unidirectional communication to a sort of chorus-like dialogue that involves friends, relatives and acquaintances in the network of the new economy.

Nico Zardo

When we speak about New Economy, the mind immediately runs to the Web. But lots of people retain that this binomial is a bit reductive and that the idea of new economy should be extended to all the forms of use of digital. Many and deep are the changes that after the 1980s, with the diffusion of the PC, have taken place through the use of digital programs in machine management, in audio and video transmissions, writing and design systems, administrative and financial management systems and also in the Web itself.

TO FIND A SIMILARLY IMPORTANT CHANGE, we must go back to the revolutionary ferments present in France and England at the end of the eighteenth century. With the invention of steam engines, manufacturing and transport (boats, locomotives...!) developed enormously, while, in parallel, new paper and printing production systems favored the diffusion of ideas and knowledge through newspapers, books and encyclopedias. Then, too, the capability of machines to replace manpower forced many people to change jobs and they were not very happy to be replaced by pieces of iron that puffed steam, to the point that they revolted, even violently. History allows us to look at those events with serene adequacy, but the grandchildren of those workers who had converted to the use of machines, whom the new western economy tends to marginalize, cannot look to their future in the same serene way.

THE WEB MAY CERTAINLY LOOK LIKE "THE LAND OF PLENTY" - EVERYTHING IS FREE: news, music, videos.

Everything is just a double click away. You can communicate by writing or talking on video with whomever you want from one side of the world to the other without spending anything (apart from the subscription to your provider) and if you want to buy something, portals such as eBay offer you an extremely wide range of choices at reasonable costs, too. One thing is certain: the new economy tied to the Web is deeply changing our way of living and working, both of which are increasingly more projected towards a virtual reality. So much so that for the new generations growing up with their eyes on the screen, an i-Pod in their ears and an i-Phone in their pockets, the borderline between real and virtual gets fainter and fainter and they are very different from those who have a few gray hairs on their heads. An interesting aspect of the Web lies in the apparently friendly attitude that seems to pervade those who contributed to its creation: typical of the libertarian climate of the 60s and 70s in California's Silicon Valley, the place of origin of the digital revolution. With that spirit, lots of software programs have been placed at people's use, free for the taking. Emblematic is the case of one of the most reliable operating systems for PCs, GNU/Linux, created by Linus Torvalds and Richard Stallman, it too, freely usable by anyone.

THE FIRST EXPERIMENTS IN COMMUNICATION BETWEEN COMPUTERS date back to July 1961 and to Leonard Kleinrock. In 1964, Paul Baran, a researcher for Rand Corporation (US Air Force research institute) working on a communication system capable of surviving military attacks, perfected a program based on the concept of "distributed network", i.e., a network characterized by the absence of a central node. In case of malfunctioning or destruction of a node, the information transmitted was able to reach its destination through surviving alternative paths. Subsequently, within the realm of the research performed by the US Defense Department in answer to the technological supremacy demonstrated by the Soviet Union with the launch of their Sputnik, a former NASA scientist, Robert W. Taylor had the idea to create a national network of computers capable of dialoguing among one another. This project

became operational in 1969 with the name of Arpanet. Through the next step, we arrived at the creation of internet, connected to the birth of ARPA (Advanced Research Project Agency) INTERNET, made possible through the work of Robert Kahn and Vinton Cerf of the TCP/IP protocol (Transmission Control Protocol/Internet Protocol) that allows controlling data flow among the different networks.

THE DIFFUSION PHASE OF THE PHENOMENON OF NEW ECONOMY gets under way at the beginning of the 1990s thanks to the British scientist Tim Berners-Lee of the CERN Laboratory of Geneva, inventor, together with Robert Cailliau, of the World Wide Web (origin of the acronym www), i.e., of the system that allows to click on words or images on the computer screen and follow connected paths of information. Such innovation is based on http (Hyper-Text Transfer Protocol) and on HTML (Hyper-Text Markup Language). In the intent of "foster collaboration among populations", Berners-Lee placed his invention at everyone's disposal, free of charge. With the launch of the first commercial browser, Netscape by Jim Clark, in 1994-95 Internet becomes an economic phenomenon. By clicking on the internet address, the navigation system allows going from one Website to another, easily entering their contents. From that moment on, the third industrial revolution explodes.

IN THE FIRST PHASE OF THE WEB (WEB 1.0) the net was used as a direct extension of the Old Economy. A new, very potent means that affected the ways companies conduct business by creating their permanent showcase on the web, exploiting visibility on a worldwide level. Thanks to the possibility of communication in simple and direct fashion with the final customer, commercial brokerage structures are noticeably reduced, with clear savings for companies. Trends towards globalization of markets, already in the making, have witnessed a substantial acceleration.

WITH WEB 2.0, definition coined in 2004 by IT editor Tim O'Reilly, internet is enriched by a new type of approach through the presence of new interactive sites (Facebook, Twitter, Wikipedia...) where the user can intervene, contributing to the creation of contents, to expanding dialogue (already present with chats and blogs) with communities of friends or acquaintances. In many cases, these sites re-propose, in virtual form, the function that the town square once had as meeting point, as a place for the exchange of ideas, for socializing and for self-representation. Not by chance it is also called the Social Web.

The lack of an authority that filters and guarantees quality of the contents has given rise to much criticism regarding these sites. The dominating position of research engines like Google has earned for itself a monopolistic condition that greatly restricts room for competitors, besides respectable records on the stock exchange.

ACCORDING TO THE "OLD" ECONOMY, the attitude that greets a new commercial initiative starts from an assessment of the cost/benefit ratio: if the market promises a good possibility of an economic return on the operation, then we go ahead, otherwise, we don't.

In the New Economy of Web 2.0, the reasoning seems to modify the order of importance of the conditions, i.e., if the operation we want to perform has an effective utility for the people who will accept the proposal, then there could also be an economic return.

WHILE IN THE FIRST CASE WE ARE IN A CLASSICAL MARKET SITUATION where, in a producer/customer relationship, goods or services are proposed, in the second case entertainment and social sites "sell" their contacts - often selected by categories - to companies advertising in their pages. The logic is analogous to the sale of advert spaces in TV programs or on trade magazines, with the difference that in Web 2.0, it is the potential customer who becomes the actor in the show that features the advert directed at him or her: a clever short circuit! We'll just have to wait for the evolution of these mechanisms into what is for some time now already being called Web 3.0 - a new Internet, a semantic, sensorial Web, a Web to be touched, felt and experienced, where connectivity, interactivity, globalization and development of creative society will merge into sophisticated mechanisms of interrogation and elaboration of the information, creating a new technology that will penetrate inside things... let's see what'll happen. •