

Sharing economy, sharing information.

Are open data addressing us towards a new wikieconomy?¹

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1. Economy is currently based on many tools and features coming from the digital world. Ongoing dematerialization of knowledge and information has made the transmission of data become increasingly easy thanks to digitalization. Transmitting, storing, and processing data affect almost all interactions and transactions of individuals and organizations. As a consequence, organizational systems dealing with the control of society, such as institutions, can count on sophisticated tools for analysing individual and collective behaviors. Furthermore, businesses offering goods and services can have unprecedented opportunities to steer consumers' behaviors.

2. At the same time Web 2.0 has made all the interactions and conversations occurring within the new media become potentially relevant for shaping marketing offers and sales promotion. But, in order to get credit in the context of social networks and blogs, advertising must be very close to information and it must be contaminated with journalism rules and with the production of knowledge about phenomena and events of everyday life. This is likely to make it difficult to distinguish the boundary between advertising, business information, public relations and objective information. It becomes difficult to acknowledge the unconventional marketing based on spontaneous word of mouth and on the viral news spreading on web by making people aware of what is happening in the world and by enabling them to interpret reality and events.

3. On the other hand, these new rules developed within digital economy offer also unforeseen opportunities to individuals and social actors. In fact, one of the main innovations arising in the last few years has been the rapid spread of new economical paradigms, which seem to challenge the classical market dynamics. Firstly the economical relevance of services is greatly increasing in respect to what happened in previous industrial economy. For example services are strongly affected by the relational aspects of interactions between producers and consumers. At the same time new technologies, especially Web 2.0 technologies have greatly expanded the possibilities of communication and interaction between individuals. This has generated a new type of business, based on sharing resources that are transformed into services to be directly offered to potential

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consumers, without intermediaries. All this dynamic is based on the use of computing platforms that puts in direct connection producers and consumers, supply and demand. This essay is aimed at exploring these issues and for outlining some guidance to use open data as an opportunity for self-enhancement . This would make it possible to establish a direct contact between those who can count on a well-established knowledge and skills and those interested in accessing these widespread resources and knowledge.

The collaborative commons paradigm and digital economy

The rapid spread of ICT-based services has radically transformed economy of most advanced countries. Services society deeply innovates decision-making processes that addresses market supply and demand dynamics: accessing functions and services is rapidly replacing the desire to possess and purchase products and goods. Now relational aspects is becoming more and more important and the ability to fully understand the communicative and cultural universes of consumers become crucial for the success of businesses.

Jeremy Rifkin has been pointing out that we are at the beginning of a revolution, suitable to challenge the capitalist system. The new rising system is called by American scholars 'collaborative commons' and its origins date back to feudal Europe. At that time agriculture was organized on a community-based pattern, and fields and pastures were shared. In the late Eighteenth century, due to the fence of lands and the concentration of ownership, cooperation and sharing were gradually overcome.

The essence of capitalism is to turn everything into a commodity characterized by a value of exchange and price. The gain is realized through a profit margin and each person involved in the chain that brings goods from producers to consumers. adds its own profit margin. The goal of each player is to maximize its profit margins while, on the contrary, competition tends to erode this share through improving efficiency and endless innovation of production processes (Rifkin, 2014).

Nowadays we are in a very unprecedented, and potentially disruptive situation. According to digital economy, marginal costs of production and distribution tend to fall precipitously and to settle close to the zero. Web society is thus a society where marginal costs are "almost zero" and this requires a very marked reconfiguration of economical rules. An e-book can be designed and implemented with no marginal costs. Widespread information provided by citizens involves today a third of the world population. Renewable energy sources can be attributed to this working model too (the sun and the wind are free). People has been printing 3D objects and goods on their own. Millions of students have access to highly qualified education through online educational tools available for free on web.

A real new economical revolution is getting closer and this will be based on a huge - integrated and intelligent -technological platform that has been defined by Rifkin Internet of Things.

Internet of Things is composed of Internet communications; Internet of Energy (distributed and decentralized networks governing the new sites of renewable energy - smart grid); Internet of new logistics (where goods and objects are connected to each other and constantly send information suitable to optimize the whole delivery process). The Internet of things will form an integrated network that will put together people, objects, infrastructures and that will be a perfect support for "prosumers", for "ConsumActors" that will be the protagonists of this new economy based on e-services and on relational power rather than on the conventional economical rules. The merging network is a sensitive structure, where each point is both transmitter and receiver in a complex network made up of sensors, digital hubs, artificial intelligence. There are obviously also problems and risks; such an integrated and responsive network is also a disturbing control system: protection of privacy and personal freedom must be significantly strengthened. It is necessary to design and implement new regulatory systems and legal arrangements to ensure the respect for civil rights in the era of cybercontrol (Rodotà, 2012). The organizational side of this new infrastructure connecting objects, people and delivery system, is the "collaborative commons". This is the virtual place where billions of people co-operate and work in a self-managed way (Rifkin, 2014, Palmarini, 2012) . In this virtual place there are voluntary groups, creative and cultural entrepreneurs, educational institutions and associations and, in recent times, thanks to collaborative Internet platforms, even individuals providing their expertise: driving a car, cooking, hosting tourists. In fact, collaborative commons promoted by internet can be easily adapted to to the rich fabric of third sector and civil economy, which strongly contributes to the production of wealth and employment in our country and throughout the world (Bruni, Zamagni, 2015).

Web and open data encourage civil economy

There is also a new actor to take into account, able to influence economy and to play an important role: the consum-actor. Consum-actor is a major economical player and it is becoming aware of its own power consisting in "voting through buying choices" as written by Leonardo Becchetti. Consum-actor can affect market shares by deciding to award an environmentally oriented company and to punish another one discriminating workers or outsourcing to countries without protection and guarantees for human rights. The slogan of the NGO Oxfam awareness campaign on environmental and ethical values is very effective, "No business is so big to ignore its consumers" (Becchetti, 2014).

The effects of consum-actor's awareness are taking their toll and there are already many successful of civil economy. One of these examples is represented by cooperative enterprises, which were founded by workers who decided to sell together consumer goods and products, or to get credit, They tried to help each other when facing difficulties and economic crisis. Cooperative businesses are an impressive force in Italy, in Europe and in many parts of the world. These businesses have high turnovers and they have been trying to contain layoffs activating solidarity contracts and forms of mutual aid.

Social cooperation plays an increasing role within this sector including banks, supermarkets, insurance companies. The values that are the basis of cooperative businesswa are highlighted in this sector: equality, solidarity, centrality of people, much more than capital and profit. Furthermore Social cooperation (education, assistance, community welfare, etc.) is one of the most promising sectors where to develop e-services.

Another interesting case of civil economy is related to trade. In recent years, the growth of fair trade was made possible thanks to responsible consumers and to the organizational capacity of entrepreneurs guided by the logic of right price instead of profit maximization. In Southern countries there is an increasing number of small production units and business networks able to get into North Western markets. This has generated incomes, development opportunities in poor areas of the planet.

To pay to the poor is not only ethically commendable, but it's a bargain as demonstrated by Muhammad Yunus, Nobel winner, in his book Grameen Bank. Microcredit, small amounts of money given to poors in many countries in order to develope enterprises or small production units, gave surprisingly high rates of return, far higher than those of traditional lenders (banks lending money for speculation or providing loans to those who already have money, just to be clear).

This is a good lesson for those who pontificates on the insolvency of poors and on the financial risks related to development projects. According to this pattern, projects and private initiatives have been developed in the field of ethical finance in order to support environmentally friendlycompanie or businesses that are committed to social objectives. The results of these funds are often in line or even better than many other credit products packed with financial derivatives and acquired without worrying about business ethics. Civil economy is an actual and credible alternative paradigm for business, job creation and territorial development.

Web has made it possible to concretely develop a new form of economy. We can call these innovations "collaborative commons" or "sharing economy" or even "collaborative economy". The concept expressed by these definition is always the same and it deals with people offering their knowledge and skills. These organizational forms use Web as a distributed cooperative structure and a marketing platform. These structeres are based on the collaboration of many people in constant

and continuous contact through the web. These organizations exceed the classic inside-outside division by promoting new working schemes and new relations with customers

These "start ups" can count on users that are directly involved in the construction of the business itself: users generate horizontal communication flows even able to improve and innovate the services provided. Consumers and "new entrepreneurs" participate together in the creation, design, distribution and evaluation of business performances. These new forms of business are easily created in those sectors based on dematerialization, transmission of information and on the access to utilities rather than on property of goods.

Phenomena such as shared knowledge and informal economy are not arising today. But they are now becoming the nucleus of a great economical and social transformation. In fact, more and more often in web society we see a crucial transformation of these "capabilities", that are oriented towards the directions outlined by the economist Amartya Sen, that is to say in the sense of multiple alternatives and possibilities, of a plurality of choices, multiple degrees of freedom and different action scenarios (Sen, 2003). People and social groups become protagonists and these 2.0 capabilities enhance the possibilities for people to access peer-to-peer networks for exchanges and transactions. So, at least in part, individuals are no longer bended by restrictions of traditional economical organizations, that were based based on the high concentration of capital, resources, and of decision-making power. In the past this was possible only with substantial budgets. Nowadays it is possible to do this by sharing assets and properties such as cars, rooms, time and abilities. It is not an absolute novelty, as many authors observed. The difference, in digital society, is represented by the pervasiveness of networks and by efficient platforms bringing together supply and demand with sustainable investments and low-risk capital (Mandelli, Arbore, 2015).

Digital business model is spreading and it encourages also new fundraising strategies for launching new products or services: crowdfunding transforms "door to door" based approach in a form of "broadbased shareholding of good ideas and good causes".

It is possible to search for funds to make a film or a documentary, to support an environmental cause, to help poors and victims of calamities, to restore a monument. But you can also launch business projects seeking to avoid the endemic shortage of venture capitals that characterizes asphyxiated and little credit systems, as Italian ones.

It is enough to convince a critical mass of small investors and potential consumers and business plan can take off. The two sides shared economy development, a social and ethical and the other oriented business development and ideas that can start even with limited resources and funds. Today these two roads are not in conflict, but often follow parallel paths and cross resulting in projects that are concrete and profitable at the same time ethical and innovative. All you need to do is to convince a critical mass of small investors, perhaps future consumers interested in the service or

idea and business plan can take off . Shared economy has two faces: a social and ethical one and a business-oriented one. Today these two roads are not in conflict and they often follow parallel paths resulting in projects that are at the same time concrete and profitable, ethical and innovative .

Towards shared and participative service design: e-services in civil economy

Networks are at the heart of arising business models, including e-business. There are new rules to follow, especially in planning and designing functions and delivery processes. As for the phase focused on needs analysis, and on the subsequent determination of services, social media favor continuous interactions and horizontal communication, sharing of experiences and instantaneous transmission of information. Traditional market research, surveys and insights on sample groups to test a service or the perception of a brand are no longer sufficient. If not completely replaced, they need to be integrated and supported by new techniques of consumer behavior analysis. It is important to arrange a continuous monitoring of the themes running through Web, to identify the relevant communication poles, capable of sorting news and amplifying the effect of contents. This will gradually outline consumer profiles and social trends that can effectively guide the design of new services and the promotion of e-services.

As for the next step of service delivery, it is necessary to introduce new feedback devices taking into account specific features of social network communication. In particular use and consumption on Web are strongly influenced by shared evaluations about purchasing and consumption experiences. The delivery of e-services should work in line with these expectations and dynamics. It would be interesting, for example, to introduce ' design architectures systems "capable of stimulating and enriching the online interaction mediated by social networks and by horizontal communication.

As explained by behavioral economists, and in particular by the American scholars R. Thaler and Sunstein C. choices are not neutral ground, and they can be properly oriented. A "libertarian paternalism", (Thaler and Sunstein, 2009) ,may enforce some goals such as healthier lifestyles, farsightedness in pension investments, environmental sustainability

According to a striking image, which has had a wide success on the media, good decisions can be obtained under a "gentle push" capable of directing substantial masses of taxpayers, citizens, workers towards socially responsible, sustainable and collectively desirable choices. The application of these concepts in the context of e-services could be aimed at developing "cognitive incentives" to the use of digital services. It may be possible for example to use the same "guidance device" of soft policies for the design of online services and for relational performances of digital

services. In concrete, this would mean enhancing the architecture of choices in new services design through feedback systems capable of showing positive and negative effects of an option or an alternative. If widely used, these control mechanisms on the one hand, would encourage rational actions. On the other hand, we could reflect on the impact of our behaviors and on the best alternatives linked to certain individual decisions. These immediate feedback systems with action reorientation purposes, can be implemented thanks to social media not only to improve e-services interfaces and online service provisions. They can also be introduced by exploiting social and collective sides of our actions, for example by using horizontal communication tools. So, it would be possible to develop and improve "reputational systems" of e-services, upon which much of their success is based. Thanks to a proper amount of "communicative paternalism" it can be possible to build reputation systems capable of producing trust, of advising, thus promoting the use of digital services and transferring functions from face to face-based delivery systems to online delivery processes.

In contemporary world and in social network communication motivation is a scarce resource: it is very difficult to convince people to pay attention to a service or to an offer conveyed by the web. This has strong impact on promotion and marketing of e-services. Persuasive and evocative advertising has to be replaced by a new code. To get an audience in the web you have to convey news, knowledge, know-how. This will generate a spontaneous circle based on the characteristics of Web and audiences constantly connected and mutually active as poles transceivers.

Finally, let's reflect on the social dimension of e-services. Service economy is significantly different from industrial economy. The capital needed to start a business are less severe; company size is reduced and human and organizational resources to be coordinated are by far less numerous. E-services enjoy the benefits arising from low initial barriers featuring online business: centrality of the idea rather than financial capital density; key role of knowledge; ability to use the network as an immense potential market for innovative services. This does not mean that everything is easy on Web: selection is severe and the width of e-audience also implies a paroxysmal crowding multitude of subjects offering products and services and seeking their own market.

New forms of economy are based on the peculiar organization of e-services offering the change to develop autonomous and self-managed platforms for delivery. Social and relational component is more important than financial and competitive sides. The possibility to raise funds on Web, the sharing of goods (home, car, office), cooperative work with self-regulated flexibility are concrete examples of new areas of entrepreneurship that can offer professional spaces and opportunities to many people. They may be young workers with innovative skills and knowledge, but also families trying to put to their skills on the market, or to invest an underutilized part of a small family fortune.

Social media extend the spaces suitable to promote informal talents, underutilized resources and small assets that can be invested on new markets or "micro-markets" organized and managed by cooperative services.

Nowadays these unusual forms of social economy, such as crowdfunding and cooperative work can be used to combat new forms of poverty produced by economic crisis, to promote social inclusion, or even to make concretely viable hypothesis of co-operative and transparent management of public goods (Sacconi, Ottone, 2015; Mattei, 2014).

In short, e-services represent a good opportunity and a challenge to spread and pursue the objectives of civil economy. In conclusion, wikieconomy may be considered as the civil economy of the Era dominated by Web and Open data.

Bibliography

Becchetti L., *Wikieconomia. Civil Economy Manifesto*, Bologna, Il Mulino, 2014. (in it.)

Bruni, Zamagni, *Civil Economy*, Il Mulino, Bologna, 2015. (in it.)

Cavallo M., *Designing and Promoting E-services*, Milano, Angeli, 2016. (in it.)

Mandelli A., Arbore A., *Digital Marketing*, Milano, Egea, 2015. (in it.)

Mattei U., *Commons. A manifesto*, Roma-Bari, Laterza, 2011. (in it)

Rifkin J., *The Zero Cost Marginal Society. The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*, New York, Palgrave Macmillan, 2014.

Rodotà S., *The Right to Have Rights*, Roma-Bari, Laterza, 2012. (in it.)

Sacconi L., Ottone S. (editors), *Commons and Cooperation*, Bologna, Il Mulino, 2015. (in it.)

Sen A., *There is a better way! An Introduction to the Development as Freedom Approach*, Winnipeg Canada, International Institute for Sustainable Development, 2003.

Thaler R., Sunstein C.R., *Nudge. Improving Decisions About Health, Wealth, and Happiness*, New York, Penguin Books, 2009.