

Politecnico di Milano Design School Product-Service System Design

CERAMIC NOW A WORKSHOP REDESIGN FOR A FEASIBLE FUTURE

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Abstract

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Introduction



FROM OLD ECONOMIC MODELS TO THE NEW SOCIAL ECONOMY

"There is a sense that there is no going back to the old order, and that a major change is required."

R. Murray

NOTES 1 Robert C. Robinson, *Encyclopaedia Britannica*, 19 November 2013.

Introduction to post-industrial society

1.1

Postindustrial society: society marked by a transition from manufactured-based economy to a service-based economy, a transition that is also connected to a subsequent social restructuring. Postindustrialization is the next evolutionary step from an industrialized society, and is most evident in countries and regions that were among the first to experience the Industrial Revolution, such as United States, Western Europe and Japan.

American sociologist Daniel Bell first coined the term postindustrial in 1973 in his book *The Coming of Post-Industrial Society: A Venture in Social Forecasting,* which describes several features of a postindustrial society. Postindustrial societies are characterized by:

- 1. A transition **from the production of goods to the production of services**, with very few firms directly manufacturing any goods.
- 2. The **replacement of blue-collar manual labourers with technical and professional workers**—such as computer engineers, doctors, and bankers—as the direct production of goods is moved elsewhere.
- 3. The replacement of practical knowledge with theoretical knowledge.
- 4. Greater attention being paid to the theoretical and ethical implications of new technologies, which helps society avoid some of the negative features of introducing new technologies, such as environmental accidents and massive widespread power outages.

- 5. The **development of newer scientific disciplines**—such as those that involve new forms of information technology, cybernetics, or artificial intelligence—to assess the theoretical and ethical implications of new technologies.
- 6. A stronger emphasis on the university and polytechnic institutes, which produce graduates who create and guide the new technologies crucial to a postindustrial society.

In addition to the economic characteristics of a postindustrial society, **changing values and norms reflect the changing influences on the society**. Outsourcing of manufactured goods, for example, changes how members of a society see and treat foreigners or immigrants. Also, **those individuals previously occupied in the manufacturing sector find themselves with no clearly defined social role**.

There are a number of direct effects of postindustrialism on the community. For the first time, **the term community is associated** less with geographical proximity and **more with scattered, but like-minded, individuals**. Advances in telecommunications and the Internet mean that telecommuting becomes more common, placing people farther away from their place of work and their coworkers.

The relationship between manufacturing and services changes in a postindustrial society. **Moving to a service-based economy means that manufacturing must occur elsewhere and is often outsourced** (that is, sent away from a company to a contracted supplier) **to industrial economies. While this gives the illusion that the postindustrial society is merely service-based, it is still highly connected with those industrial economies to which the manufacturing is outsourced**.¹

The context of the crisis

1.2

This chapter wants to introduce how, from 1990s till now, in the middle of the 2010s, we are attending to a series of changes in every field of our world, regarding economics, society, politics and all the system as we are use to know them. Not only how, but also what is happening, especially in the definitions of "work" and "industrial production", traditionally intended.

The "shift of paradigm" is not a new concept in association with the word "economics" or "design", and there are many changes that are happening now or that began in the past decades and the effects are becoming more tangible and visible in this particular moment.

To be more precise, "paradigm shift" is an expression invented by Thomas S. Kuhn in 1962, with his masterpiece *The Structure of Scientific Revolutions*. Originally this definition was created to describe a radical change in the basic assumptions of a ruling scientific theory. Although Kuhn insisted on the application of the concept restrictively to the exact sciences, from then on it was borrowed by thinkers and experts to indicate a shift in the fundamental events model of human experience.

The current economic crisis, a crisis of the real economy, - of an old form of production and consumption, of its use of resources and means of transportation -, is resulting a perfect context for one of this paradigm shifts. This situation is not just a downturn of the banking and financial system, that is possible to stem restoring flows of credit and finance. It is following longerterm technological

2 Perez, C., Technological Revolutions and Financial Capital. Cheltenham: Edward Elgar, 2002; see also her article on the economic downturn of 2008-2009, After the crisis – creative construction, Open Democracy, 5 March 2009.

changes, as the one of the 1930s. It is a connection between old and new.

As Robin Murray say in his book *Danger and Opportunity*, about this subject:

"Such crises, as the Austrian economist Joseph Schumpeter pointed out, are periods of creation and destruction. In these circumstances, monetary and fiscal measures are unlikely to restore growth by themselves. What is needed is a programme of more profound structural change, of a radical transformation of infrastructures and institutions that will be the precondition for a new, qualitatively different period of growth. Anything less is an appeasement of the past."

Therefore, radical social, environmental and political transformations are needed in this frame to not "restore the boat and go on after the storm", but to find adequate solutions to face a completely new situation, hailed from deeper structural issues behind financial markets problems.

Schumpeter's theory of how business cycles are connected with very concentrated periods of technological changes and innovations was very forward-looking of what happened from the early 1920s to the 1940s. But is still valid to predict and explain the actual economic scene, with some indepth observations cleverly done by the British economist Christopher Freeman and by the Venezuelan economist Carlota Perez.²



NOTES 3 - 4 Murray, R., Danger and Opportunity, crisis and the new social economy, The Young Foundation, 2009.

Perez applied these observations to the current crisis, and was one of the few economists capable to predict the course of the financial bubble and its crash. So, crashes are critical hinges during technological revolutions. After about twenty-thirty years from an emerging new technological paradigm, followed by an intense finance-led activity period around this, the bubble crashes. This is due to a plenty of visions and odd hopes offered by the new change (i.e. the Internet bubble).

The next phase is a short period of capital devaluation and a recomposition in policies and institutions that open new opportunities for a golden age (the "period of deployment"cit.). Here the new technology find the space to flourish and being exploited in every field, from industry to institutions. The moment is particularly appropriate for an intensive private and social innovation.

The last phase is about the fully realization of the shift. This depends on "[...] whether the powerful industries and organisations of the previous paradigm use the new technologies to reenforce their entrenched position, or whether the new forces can reshape the institutions, spread the gains from the new technologies more widely and reach a new social settlement." (R. Murray).³

To find the roots of the crisis, we need to go back to the early 1970s, where economists indicate three factors that caused an important fall in the mass production paradigm. Those can be resumed as an international liberalisation that exposed old markets to new risks, a broader diffusion of flexible production systems linked to just-in-time retailing, a diffuse transfer of mass production industries to countries of low cost labour, that provoked a shift in the income distribution from wages to profits (the tangible result was a fall of the share of earnings in the OECD countries.

As consequences of these factors the duration of mass production paradigm resulted extended without a solution for its limits. For instance, in countries as UK and US where there was a falling share of earnings, there was a problem of final demand due to the increasing inequalities of pay and bonuses among wage earners. This factors reflected both internally and internationally, where export-surplus countries with a limited domestic demand provided credit, becoming heavy for increasingly indebted countries. At the same time, starting from the 1970s, the new paradigm based on information and communication technology was growing in importance and interest, generating an increasing promise of profit that led to the financial frenzy of the 1990s. This process ended in 2000 with the burst of the Internet bubble. Nevertheless the burst did not land to a generalised depression, because finance, aided by low rates interest in US, move back to create another bubble in housing and consumer credit. But the mass production paradigm was doomed to succumb to that new consumer bubble burst in 2007.

As Murray gathers in his essay: "There is a sense that there is no going back to the old order, that the old industries, lifestyles and international institutions cannot continue in their current form, and that a major change is required."⁴

New future scenarios: towards the third industrial revolution, the Digital Era

1.3

In the last period, in Italy, there is a growing interest and excitement about the "Italia Digitale", far more than free wi-fi or big data or open source softwares. Probably "we are", as J. Rifkin says " living the third industrial revolution, the digital era". This revolution implies three new technologies that creates and defines new infrastructures for planning the economic life.

In the Nineteenth Century, with the first industrial revolution, in England was developed the first telegraph, there was a shift from the manual printing to the steam-powered printing press, and arose the steam locomotive.

In the US, in the Twentieth Century a second industrial revolution occurred, crucial for the communication, energy, transportation and logistic fields. It went from centralized electricity, to television, passing through the telephone and the radio. Furthermore, with the use of oil, it arrived to the internal combustion engine, that Henry Ford will bring on the road with the manufacturing of cars, buses and trucks.

Now we are attending to new transformations in the same fields: communication, energy, transportations and logistics.

Everybody use Internet, with smartphones, laptops and softwares. Internet is totally embedded in communication, with digitalization, in renewable energies, in transportation and logistics with an always higher level of automation and selfdrived vehicles.

The world is going towards a reality of "super-Internet", as Rifkin calls it, or "Internet of things", as Kevin Ashton called it for the first time in 1999. What is happening practically is that a larger and

5 A value chain is a set of activities that a company operating in a specific field performs in order to deliver a valuable product or service for the market. This model was theorised for the first time by Michael Porter in his book *Competitive*

Advantage: Creating and Sustaining Superior Performance in 1985.

larger number of sensors is being embedded in every device, every car, every appliance, so they can monitor in real-time the economic activity in the whole country and send back data to this three "Internets" that are merging themselves: communication, energy and transportations. This means that every person who owns a smartphone in Italy and has access to a service, can see the data that weigh on the "value chain".⁵

Everyone of us has a value chain in which the economic activity is divided, by producing, consuming and recycling. So, in Italy, for every small or medium-size company, every no-profit organization, or neighborhood association is possible to enter this new platform and check all the big data affecting on its value chain. It is possible to use our own analysis tools to create algorithm applications, in order to remarkably increase the aggregated efficiency. Every step further in the process should let grow the productivity and reduce the marginal costs. In the future years we should be able to make and share, also for free: for this reason is developing and spreading the so-called sharing economy.

An example of the effects of the actual process, the digital revolution, can be seen regarding the renewable energies. Now an increasing number of Italians are placing on their roofs solar panels, windmill blades in their fields and geothermal heat pumps. In theory, once payed the fixed costs of these technologies, the energy marginal costs of production tend to zero. Everyone of us can start producing his own energy in houses, offices, factories and neighborhoods and then sell the exceeding amount to who is in need.

Regarding the transportation and logistics fields, new technologies as the integration of GPS in a digitalized system of transportation, especially new generations are able to share mobility, increasing sustainability.

A new world can be envisioned, were people can print their own products with 3D printers powered with renewable energy and share them on a transportation system managed with electric vehicles. This is, indeed, a desirable vision of a future world, not seeming too far.



THE TECHNOLOGICAL REVOLUTION FROM THE 60s TO TODAY

The Sixties are those of the early history of Internet: they open with the launch of the ARPA project by the United States Department of Defense and they close with the first network connection of the computers of four universities.

But in history books the place of honor goes to John F. Kennedy, elected President of the United States of America, and to his challenge to bring the man on the moon. Not many know that, if the 20th of July 1969 the astronauts Neil Armstrong and Buzz Aldrin are able to accomplish the mission, is also thanks to the Programma 101, "the first table computer of the world", created by Olivetti in 1964 and used by NASA for the moon landing.

Adriano Oliveti was one of the firsts to believe in the future of electronics, owner and manager of the company from Ivrea. In 1955 he created the Electronic Research Lab, an actual startup, animated by a small group of young "rebellious", among whom there was Pier Giorgio Perotto. From this centre had arisen the project that in 1964 led to the launch of P101.

In 1972 appeared for the first time the @ of emails. Internet is still far, but, with the new concept of Silicon Valley, starts the digital revolution that has changed our lives. Differently from what we can think, this is not due to an American, but to Federico Faggin, an Italian. He signed in 1971 the first microprocessor in the world, the Intel 4004.

The microchips, so important as "brains" of thousands of "smart" devices we are dependent on today, are its more powerful and cheaper descendants.

In the middle of the Seventies Bill Gates and Paul Allen found Microsoft. At the same time Steve Jobs and Steve Wozniak create Apple. Howevere the firsts personal computer are expensive and very difficult to use, automation is already transforming the offices work.

Olivetti, leader of the "old" typewriter market, both mechanical and electrical, understand that it needs an innovation. In 1976 the manager Marisa Bellisario approves the concept of a totally electronic typewriter: the ET 101, the first of this kind, launched at SMAU in 1978. The introduction of the protocol TCP/IP paves the way to the Internet era: at the end of the Eighties the connected computers in the world will be over a hundred thousand. The Personal computer becomes a mass product with the first IBM pc, introduced to the market in 1981. On the 3rd of January 1983 the magazine "Time" put on its cover the pc as "The Machine of the Year", instead the traditional "Men of the Year". In 1984 Apple launches the Macintosh with a commercial against the IBM "Big Brother". In the same year Olivetti enters the challenge with its M24 designed between Ivrea and Cupertino. In a small amount of time Olivetti moves to the top of the world pc producers. The digital revolution conquers also the music sector: in 1988 starts the activity of the international technical committee MPEG (Moving Picture Expert Group) that will dfine the new MP3 format. However, the most important fact happens in Geneva. In 1989 at CERN, the European Centre for Nuclear Research, led by Carlo Rubbia, Tim Berners-Lee and Robert Cailliau, is invented the HTML language and the World Wide Web.

Marc Andreessen invents the first browser, Mosaic, and Internet becomes accessible to the general public. Italy gives important contributes to the dot.com revolution, starting from Cagliari: here, in 1990, Carlo Rubbia found the CRS4

(centro di ricerca e studi superiori). The CRS4 labs become the core of an high-tech ecosystem, whose protagonist is Nicola Grauso. He is the founder of Video On Line, the first big Italian Internet provider, third in the world for dimensions. In 1995, in Padua, Massimo Merchiori elaborates Hyper Search, the first algorithm for online researches that uses the concept of hyper information (that selects results on the basis of their relation with the entire web). In 1997 he introduces the projects to an international convention, inspiring Larry Page and Sergey Brin to create Google in 1998.

In this decade Italy is distinguishing itself also in the industrial sector: FIAT researchers, led by Mario Ricco, develop the diesel engine, more efficient and less polluting.

2000 opens with the burst of the Internet Bubble: the dot.com quotations at Nasdaq plunge. Nevertheless innovation and entrepreneurial spirit do not stop here. On the contrary, in the first decade of the new millennium a lot of new startups appear - from Linkedin to Skype, from Facebook to Youtube, from MakerBot to Kickstarter - and a lot of revolutionary

products debut, from iPhone to Android.

Italy gives a fundamental contributes with a new generation of "geeks", as Massimo Banzi, inventor of Arduino. There are also small entrepreneurs as Marco Astorri and Guy Cicognani, that produce bioplastics, and Enrico Dini, who "prints" houses. Let's not forget young important scientists as Benedetto Vigna: he develops the first accelerometer with Bruno Munari. And also Maria Chiara Carrozza, leader of the Cyberhand team, Roberto Cingolani and Giorgio Metta

that give birth to "child" robot iCub. The creativity of the Sixties is living again in the "garage" of the digital makers, in companies research centers and in FabLabs that are blooming in Italy.



The high-tech industry is one of recovery driving forces, after the financial crisis of 2008. The Makers movement plays its role and in 2014 the White House host a Maker Faire for the first time. Massimo Banzi participates with his Arduino and signed a partnership with Intel. In the transportation field Italians are very active and are designing and prototyping innovative products such as the first 3D printed car and the lightest plane of its category made out of carbon (2010).

6 Ardvisson, A., *Rifkin e il capitalismo*, Doppiozero, 27 October 2014.

7 Schor, J., The overworked American: The unexpected decline of leisure, BasicBooks, 1993.

How the digital revolution influenced industrial production

1.3.1

The questions now are: how this will affect on the capitalistic model of economy? Is it true that the advent of this "Internet of things" will lead the old production system of goods to disappear?

It is true that is occurring a fall of marginal costs of production, but this phenomena is not new. As Ardvisson says "the fall of these costs is an ongoing tendency at least from the rising of industrial capitalism."⁶

It is an intrinsic factor of capitalistic economy to trigger a continuous process of productive, technological and organizational rationalization, and it is true that this tendency was hugely accelerated by the diffusion of digital technologies in industrial production.

Starting from the Eighties, the production costs for goods as computers, washing machines, toasters, cars, mobile phones, etc., have drastically reduced, so much that even the researchers endorse the thesis that this downturn balanced out the salary decrease, initially of the working class than of the middle-class. In the end this change affected also the price of the consumption goods.⁷ For example, in the Sixties a refrigerator cost an entire month of salary of a medium worker, today it costs one third of a medium wage.

Even if the process of such a quickened fall of marginal costs of production is underway for three decades at least, the capitalism is not about to end. This because the capitalistic answer to the downturn of the marginal prices - and with this also the profit NOTES 8 Source: Ocean Tomo, LLC, January 1, 2015

margins drop in the material production -, it was the attention put by big companies to the values linked to the intangible dimension of goods. A clear example is Apple: even if the margins of profit in the material production of an iPhone are next to zero, the profits gained on the basis of its intangible elements, like the brand or the Apps, are remarkable.



COMPONENTS OF S&P 500 MARKET VALUE⁸

From the mid of the Seventies, in other words from the beginning of the digitalization process of the industrial production, is occurring an ongoing shift of big companies value from the "tangible assets" - that are the resources addressed to the material production -, to the "intangible assets" - the resources like brand, innovation and intellectual capital - that are able to produce intangible value.

Therefore, the capitalism as we know it, was not at all threatened by the dramatic fall of the marginal costs of production, but it had been simply restructured. It has just strengthened its position, making its influence more marked on social processes and on NOTES 9 Rifkin, J., *The Zero Marginal Costs Society*, Palgrave Macmillan, 2014

> people's life. Of course it is not said that nothing changed and nothing will change. The impact of the "third industrial revolution" - happened during the Eighties, long before the diffusion of 3D printing -, has already modified the rules of the game. The impact of its second phase, based on the "Internet Of Things", together with the second generation robotics, - machines able to self-learn and not only replicate, more generally artificial intelligence -, will change the rules more and more radically. Nevertheless this analysis suggests that the fall of capitalism, or more pragmatically the break of balance between capital interests and society interests that will lead future production and consumption processes, will not be a simple consequence of the technological transformation, exactly as it was not like this when similar changes had been predicted in the past.

On the other hand, if the Rifkin's "zero marginal society"⁹ will be lead from capitalistic interests, it will depend on the balance of power resulting from the struggles those will go along this technological change process.

As described very well by economists such as Sergio Bologna or Andrea Fumagalli, in reaction to the downturn of the marginal prices of material production, capitalism reorganized itself moving its helm to a financial level, both in productive processes and in its life as a whole.

Even if we all become able to produce our own energy to fulfill our needs, or commit ourself to small Makers craftsmen for material goods that we need, as long as the necessary capitals to invest in solar panels or 3D printers remain under control of the bank system, the capitalism as we know it will not have any problems to reproduce its dominance on society.

In conclusion, the only way to face the capitalistic nature of the future society could be to regain the control of this financial helm, bending it to a broader range of interests and democratizing finance.

How the crisis influenced traditional manufacturings. A case: the ceramic sector

1.3.2

After analyzing what it is the general trend for the companies that are facing the digital revolution moving the assets from to tangible to intangible, we need to investigate what is happening in the traditonal industrial reality. This reality that is not about to die, it is in deep transformation. It is true, a lot of these enterprises closed and where closed and have been overwhelmed by the crisis, however, nonetheless a lot of them are still working and are inverting the trend.

The ceramic sector has been chosen for different reasons. Ceramic is a material that has a long industrial tradition, especially in European and Far Eastern countries, but its diffusion cover almost all over the world. In addition is related to design history from the dawning of in serial production. Ceramic, today, has a wide multiplicity of application, from more traditional (tableware, tiles), to more innovative (biomedical sector, engineering). This because it is a material that can be broadly varied in its composition, acquiring, this way, completely different properties that make it suitable for a great range of uses.

The choice of this industrial sector depends also on the strong connection to Italy that this material has: the subject and the starting point of this thesis, in fact, is a project that has to do with ceramic world. In particular, the ceramic industrial production in our country reagards basically tiles, bathroom fixtures, refractories and flatware.

10 "advanced ceramics tend to exhibit unique or superior functional attributes that can be 'precisely specified' by careful processing and quality control. Advanced ceramics are referred to in various parts of the world as technical ceramics, high-tech ceramics, and highperformance ceramics." Mason, Thomas O., *Advanced Ceramics*, www. britannica.com, 30 June 2014 11 Seidler, K., 2014 CI Top 10: Leading Worldwide Manufacturers of Advanced Ceramics, Glasses and Refractories, www.ceramicindustry.com, 2 September 2014

TOP 10 LEADING WORLDWIDE MANUFACTURERS OF ADVANCED CERAMICS¹⁰. GLASSES AND REFRACTORIES¹¹

EMPLOYEES FOR EACH COMPANY



REVENUES IN 2014

10%

AVERAGE N. EMPLOYEES



45.920

HEADQUARTERS LOCATION



USA



2 / / 0 1-5 billion

27%

> 1 billion

12 Stock, D., World Production and Consumption of Ceramic Tiles, www.infotile.com, 2011

> The data reported in the charts regard specifically the ten world biggest manufactures in the production of high-tech ceramics, glasses and refractories. This is to give a general overview on the ceramic world, not only tiles or traditional industrial ceramics.

The ranking underlines the dominance of Europe in this sector, in fact on top of the chart we find France with Saint-Gobain, producer and distributor of building and high-performance materials. Other European countries in the chart are Germany, Austria and England than we find Japan and US.

This situation is not so different from the ceramic tile industry (traditional ceramics), that will be take into consideration for its consolidate tradition in the industrial ceramic field, both in Italy and worldwide.

For many years the manufacturing sector of the tile industry was adversely affected by the declining capabilities of Italy and Spain. This phenomena started in 2007 with a slight slowdown, to fall dramatically in 2009, suffering the effects of the global crisis. The problems that plagued those tile producing nations not only imperilled many of the world's most reputable manufacturers but also had the unfortunate effect of overshadowing much of the industry's progress in Asia, South America and non-EU Europe. Both countries enjoyed belated revivals in 2010 which provided much needed boosts to tile production in the European Union.¹¹

Asian countries preserved their dominance of global manufacturing, from a quantity viewpoint, strengthening their collective output by eight per cent to 8.315 billion square metres. Tile producers scattered across the hurriedly developing continent thus fashioned seven out of every ten ceramic tiles made around the world. Although the production-related figures emanating from China are notoriously difficult to accurately quantify, due to deep-seated incongruities in the disseminated statistics, more trusted sources have ascertained that Chinese production amounted to 5.7 billion square metres in 2013. This figure denoted
an increase that comfortably exceeded Asian and worldwide averages; with the output of ceramic tile manufacturers in the single-party state escalating by an impressive 9.6 per cent. Chinese sources have estimated their capacity to be nearing ten billion square metres with some 1400 companies and 3500 manufacturing lines. At present, the world most populous nation singlehandedly creates 47.8 per cent of all ceramic tiles. The Indian tile industry continues to improve with its

manufacturers producing an admirable 750 million square metres. Indian firms have almost doubled their output over the past five years which has prompted the more high-end and reputable among them to embark on a belated export strategy.

The uncharacteristic sluggishness that enveloped the Iranian manufacturing sector detracted from the continent otherwise commendable performance.

The mixed and transition economy of the Islamic Republic has regressed in recent times with Gross Domestic Product declining once the baneful consequences of domestic price controls and subsidies and widespread corruption in the private sector could not be contained or counterbalanced. Iranian manufacturers succeeded in replicating their outstanding, record-breaking efforts from 2012 with production equalling, but not surpassing, 500 million square metres. Despite this repetition, the nation retained its status as the third most prolific Asian producer and the fourth biggest in the world.

A nation thoroughly deserving of attention and praise encompasses the sprawling archipelago of North Australia. Indonesia's inhabited islands are home to ceramic tile manufacturers that have more than doubled their output since 2006 leading them to supplant their counterparts in Turkey and Vietnam. The latest upturn in production exceeded eight per cent, ensuring that the Newly Industrialised Country manufactured 390 million square metres in 2013, duly outstripping Italy, a European heavyweight. Vietnamese tile-makers recovered in heartening fashion following a truly nightmarish slump that saw the output of the Indochinese country, with its rapidly expanding, socialist-orientated market economy, deteriorate by close to one-quarter. A modest but welcome return to form enabled Vietnam to heighten production to 300 million square metres.

The straitened European Union is engaged in a seemingly futile search for consistent and meaningful growth, with GDP contracting across the eurozone for the third time in five years. Structural shortcomings have engendered economic underperformance and uncertainty, as well as very high levels of debt and unemployment. These problems have gradually permeated the ceramic tile industry, with a diminutive but nonetheless symbolic regression witnessed in 2012 and negligible progress recorded twelve months later. Its twenty-eight member states produced 10 per cent of the world ceramic tiles – 1.186 billion square metres – in 2013.

Spanish manufacturing resurgence continued apace with the once unimaginable losses sustained during the darkest days of the financial crisis recouped to some extent. The output of ceramic tile makers in the Iberian country dipped by approximately 45 per cent, and though much work needs to be done – hopefully amid more favourable economic circumstances – four successive years of ceaseless regeneration have culminated in firms producing 420 million square metres, confirming Spain position as the largest tile producer in the European Union.

Italian tile production totalled 363.4 million square metres in 2013. The nation's manufacturing sector dwindled slightly, with three fewer enterprises and a streamlined workforce minimising their output by 1.1 per cent.

Eastern European production is heavily concentrated in Poland where brands such as Opoczno and Cersanit are manufactured by the Rovese Group – which also owns smaller factories in Romania and Russia. Russian manufacturers continue to prosper, their collective efforts amounting to 166 million square metres. NOTES 13 - 14 Stock, D., World Production and Consumption of Ceramic Tiles, www.infotile.com, 2014

Three quarters of the ceramic tile that emanated from Central and South America was made by Brazilian firms. The ceramic tile industry in North America stood still with production returning to 300 million square metres. Such endeavours in the United States are often the preserve of groups based in Italy, which have invested copiously in areas such as Kentucky and Texas and produce much of the ceramic tile that originates in the US.

African tile production remains strongest in the north of the continent, with nations such as Egypt and Morocco habitually exercising a more pronounced influence than their counterparts to the south. Growth slowed alarmingly in 2013 with the output of ceramic tile manufacturers advancing by less than three per cent, from 349 million to 359 million square metres. This regrettable trend can largely be attributed to the debilitating violence in Egypt, which resulted in another coup endorsed by the military. Oceania created five million square metres of ceramic tile: an amount that remained unchanged from 2012.¹³



How the crisis influenced the social system: introducing social innovation

1.3.3

Social innovation, as an expression, can have a multiplicity of meanings. It could be intended as a shared innovation that generates new technical and organizational knowledge. It can indicate a specific practical approach to the social issues, that applies management techniques to solve present problems, not caring too much to ideologies or to politics. Social innovation entails also the use of new technologies and of new organisational forms, where bottom-up organizations coexist with a network sociability, where social relations become tools for the management activity. The consequence of this coexistence is an always narrower separation among working, political and private lives.

For these reasons the social innovation is a promising chance to rearrange productive and social relationships. It has been since the Seventies that the industrial production is more and more automatized, but they produce always the same goods. Since the Nineties we have internet, but it is used basically as a marketing tool. Nowadays we are still in the consumer paradigm, the same that was born in the Thirties as an answer to an industrial overproduction crisis. But this crisis is different: it is due to an inability of the society to transform itself creating a new social structure capable to take advantage of information and communication technologies. Another difference from the 1929 crisis is that the actual massive production resulted by this automatized processes is not sustainable from the energetic and environmental point of view. To go on and further and overcome this moment we need to rethink radically the system and not taking the past as a model. Our way of production needs to integrate reuse and recycle as a focal issue, and the same could be said for our transportation systems, our way to face the energetic demand, of food production and consumption. Social innovation does not come from institutions. It comes from a variety of bottom-up initiatives, everyday experiments, that require to be guided and scaled, to become strong and powerful. To become the new paradigm.

These issues are perceived as vital for the society all over the world. For this reason bottom-up initiatives are rising everywhere, especially when institutions are incapable to give the right answer to communities needs.

15 sharing economy an economic system in which assets or services are shared between private individuals, either for free or for a fee, typically by means of the Internet: 'thanks to the sharing economy you can easily rent out your car, your apartment, your bike, even your wifi network when you don't need it' (Source: http://www.oxforddictionaries. com/definition/english/sharingeconomy) 16 Botsman, R., *The Sharing Economy Lacks A Shared Definition*, www. fastcoexhist.com, November 21, 2013

New emerging economies: the *sharing economy*, what and why

1.4

This year the definition of sharing economy has been included in the Oxford English Dictionary.¹⁵ This means that is a consolidated concept now and that is an idea here to stay.

To clarify the term, we can say that *sharing economy* is "an economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits. It is currently largely talked about in relation to P2P marketplaces but equal opportunity lies in the B2C models."¹⁶

This economic model has its roots in the economic and social phenomena that had risen after the crisis, integrated in the bigger picture that had been already broadly analyzed in the previous paragraphs.

The first issue we want to focus on is the fracturing of the understanding of what sharing economy is and is not, because the picture is expanding very quickly and confusing. Many terms are being used to describe a broad range of startups and models that in some way use digital technologies to directly match service and goods providers with customers, bypassing traditional middlemen. "Sharing economy" is often use interchangeably with "peer economy", "collaborative economy", "on-demand economy", "collaborative consumption", even if they mean different things. The same happens with ideas like "crowdfunding", "crowdsourcing" and "co-creation". So, this terms do have different meanings, but this overlap can be justified from the common core ideas at the basis of everyone of them.

17 Botsman, R., Defining The Sharing Economy: What Is Collaborative Consumption—And What Isn't?, www. fastcoexist.com, 27 May 2015

The term "sharing economy" is frequently applied to services where there is a very efficient model of matching supply with demand, but no sharing and collaboration values involved.

As Rachel Botsman observes, when we want to understand whether a company is part or not of the sharing economy group, it can be useful to identify some key criteria to apply when filtering them. She individuates five ingredients that are necessary to a truly collaborative, sharing-driven company:

- the core business idea involves unlocking the value of unused or under-utilized assets ("idling capacity") whether it is for monetary or non-monetary benefits;
- the company should have a clear values-driven mission and be built on meaningful principles including transparency, humanness, and authenticity that inform short and long-term strategic decisions;
- the providers on the supply-side should be valued, respected, and empowered and the companies committed to making the lives of these providers economically and socially better;
- the customers on the demand side of the platforms should benefit from the ability to get goods and services in more efficient ways that mean they pay for access instead of ownership;
- the business should be built on distributed marketplaces or decentralized networks that create a sense of belonging, collective accountability and mutual benefit through the community they build.¹⁷

18 Botsman, R., *The Sharing Economy Lacks A Shared Definition*, www. fastcoexhist.com, November 21, 2013

Speaking a new language: a note on definitions

1.4.1

Before going deeper in this analysis, it is important to be as clear as possible on the huge amount of concepts related to this period of transformation we are living in. This because there is quite a lot of confusion about the online and offline collaborative activities and phenomena, so a lot of terms are used inappropriately.

Words as "sharing", "collaborative", "open", are more and more common to find in our daily lives and in the services that surround us, but, in a lot of cases, they are used in a misleading way. As Rachel Botsman says: "Definitions are hard, especially when they are trying to capture new ideas never expressed before."¹⁸

Everything is vague to a degree you do not realize until you have tried to make it precise.



Bertrand Russell

For *collaborative economy* is intended "an economy built on distributed networks of connected individuals and communities versus centralized institutions, transforming how we can produce, consume, finance, and learn. It has four key components:

- **1. production**: design, production, and distribution of goods through collaborative networks
- **2. consumption**: maximum utilization of assets through efficient models of redistribution and shared access.
- **3. finance**: person-to-person banking and crowd-driven investment models that decentralize finance.
- 4. education: open education and person-to-person learning models that democratize education.

Collaborative consumption is, instead, an economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership. It is reinventing not just what we consume but how we consume. It consists of three different systems:

- 1. <u>redistribution markets</u>: Unwanted or underused goods redistributed
- 2. <u>collaborative lifestyles</u>: Non-product assets such as space, skills and money are exchanged and traded in new ways
- 3. <u>Product-Service Systems</u>: Pay to access the benefit of a product versus needing to own it outright.

We have already talked about sharing economy in this chapter, but it is important to mention it again, because it is part of all this new terms that we are trying to map in this paragraph. According to Rachel Botsman, as *sharing economy* is intended an economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits. It is currently largely talked about in relation to P2P marketplaces but equal opportunity lies in the B2C models.

Peer economy, on the other hand, is the set of person-to-person marketplaces that facilitate the sharing and direct trade of assets built on peer trust. Peer-to-peer means from equal to equal, where all the participants have the same roles and positions in the network, where the relational dynamics are based on this equality. It is the pure P2P slice of the sharing economy but also includes

craft marketplaces like Etsy that matches makers of goods directly with buyers, as well as peer-driven production models such as Ponko that are not pure "sharing" models, but that are built on similar peer trust dynamics.

Finally, is important to define also *on-demand services*, because they are confused and misused in the majority of the cases with the other definitions that we gave before, but they do not share the same core values of the other concepts. The only common trait is the use of internet ad of online platforms as touchpoints of this services. That said, on-demand services are platforms that directly match customer needs with providers to immediately deliver goods and services.



HOW COLLABORATIVE ECONOMY TRIGGERED COLLABORATIVE PROCESSES

"Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit..."

Introduction

2.1

Inside the concept of collaborative economy model, we can individuate different parts: collaborative finance, collaborative education, collaborative production and collaborative consumption.

The sharing economy, in particular, is part of the collaborative consumption model. It is important for the key values on which is based, especially for the new ways of working and sharing knowledge, spaces, and idle assets that have been developped inspered by its values.

Also companies are understanding that taking advantage of the services and tools born thanks to these values of "sharing" and "collaboration" can make the difference between being more competitive and innovative or not.

In this chapter we will analyze which are these enabling services and tools and some case studies of start-ups and companies that provide services for other businesses and/or final users, building their fortune acting as facilitator and enabling platforms.

We will take the move from how the idea of collaboration rose and developped inside companies. How outsourcing, not only in terms of production, but also in terms of design and innovative ideas generation it is becoming crucial. How new funding tools are helping ideas to become true and feasible. How the shared spaces are enabling different professionals to collaborate and "infect" each others. $\mathsf{CHAPTER}\ \mathsf{TWO}\ |\ \mathsf{How}\ \mathsf{collaborative}\ \mathsf{economy}\ \mathsf{triggered}\ \mathsf{collaborative}\ \mathsf{processes}$

Sharing knowledge and trust: new collaborative processes

2.2

With the traditional theories, - especially the scientific organization of work or Taylorism and the school of management principles of the French engineer Henry Fayol -, was born the modern organization. Their statements have accompanied the development of large company and have made possible the radical leap in efficiency, that the enormous potential of technological innovations promised, but it was hampered by the existing organizational practices. With the classical theories a fundamental concept has made its way: that the organization is still a rational construction, which aims to bring under control the assets, people and relationships with the larger context in which they operate. This was translated into practice as a strong fragmentation of work and tasks, a clear subdivision between who design and who do and long hierarchical chains. A structure, therefore, characterized by deep "organizational fractures" and by a strong fragmentation of the work, where the coordination for the realization of the objectives depends mainly on the hierarchy. The recomposition of this fragmentation had been the leitmotiv in later elaboration of organizational practices.

One of the main evolution lines of theories and organizational practices, since 1930's, but especially after World War II, it has been the research of integration and intra-organizational cooperation, in response to the limits and the problems posed by the successes and large scale spreading of the so-called classical theories of the organization. The first that introduced the perspective of the organization as a *cooperative system* was Chester Barnard.

In 1950s in the general context of the success of the theory of the systems, the trend of socio-technical systems placed at the center of organizational design the cooperation among the operators. It follows that the basic organizational unit is not the task, but the and the central role of the working group.

The cluster of organizational and management innovations that have emerged since the 1970s and 1980s linked with the new information technologies, from *total quality management* to *just in time*, from the *total productive maintenance* to *concurrent engineering*, to the *lean production*, it is based on assumptions and organizational logics that in very general terms, can be traced to two bottom lines. The first is the reduction of the need for integration and coordination, through the redesign of roles and the use of teamwork, with increasing responsibilities to the results of the activities and the level of delegation accordingly. The second, closely linked to the previous one, it is to increase the involvement and motivation. It is evident the importance that, at least in theory, is given to the issues of cooperation and the contribution of employees.

Since the 1990s, the spreading of *process management* and the redesign of business processes made possible by the new potentials of computer technology, represented a further step in the search of interfunctionality and organizational integration. The shift regards also the integration with suppliers and clients, to rebuild and maintain continuity and regularity along the value chain, beyond organizational and functional barriers.

Also since the 1990s, organizational learning and knowledge management have gradually emerged as key elements in the evolution of organizations. The availability and dissemination of information and communication technologies contribute to improve the management of information and documents. But, above all, they facilitated the exchange, interaction and collaboration between people inside and outside the organization. In addition, as demonstrated in particular the experiences of communities of practice, allowed to circulate the tacit knowledge NOTES 1 SME, small-medium enterprises

and to generate new knowledge.

Finally, in the context of organizational structure, we are assisting at the success of *net functioning model*. On one hand, the hierarchy of the largest vertically integrated company dismantles by creating both *internal networks*, - highly autonomous units with direct responsibility for the results obtained -, both *external networks*, - ie networks of vertical supply agreements and strategic alliances and networks for innovation -. On the other, the formation of horizontal networks between SMEs¹ meets the needs of scale and complementarity of resources needed for international competition. The image of the network is strongly evocative of the theme of collaboration: the nodes are characterized by a high level of self-regulation and at the same time from a strong capacity for interaction and cooperation.

In conclusion, organizational models based on collaboration started long ago. So, what is social media introduction about? Why does it represent not just an incremental shift, but a disruptive jump from before?

What organizations have long pursued in the recomposition of the fractures generated by hierarchical models, are the forms of collaboration that help to coordinate activities among the people or organizational units within pre-defined patterns of action, to limit the use of expensive and slow mechanisms of supervision and implementation of forms of mutual adaptation. Applications that, in the context of social media, concern the communication support (*Unified Communication & Collaboration*) and the creation of virtual workspaces (*Mobile Workspace*) represent a further step. They are a strengthening of the contribution of technology in the direction to facilitate the exchange of information, synchronization of activities, remote interaction: all steps relevant in the path already traced, that enable the improvement of organizational integration based on direct interaction and mutual adptation. However there are other relevant dimensions of collaboration as co-decision, participation at problem-solving, conjuncted generation of innovative ideas, contents, knowledge, dvelopment and maintainance of relationships among people, openness to the outside, self-generation and adaptation of the same way to interact and organize.

The bet - and this implies to open a truly new trajectory for innovative organizations - is to enable the implementation of these forms and levels of collaboration, extensively and systematically: for this reason we speak of *mass collaboration*.

The first aspect of the change is the activation of the individual contributions and their enhancement by comparison and interaction with those of many others. The mechanisms of cooperation, if the basic rules of the community work, allow the synergy between different contributions, creating value for the organization and at the same time motivation and sense of belonging in the individuals.

The second key aspect of the change is the organization, in particular how it can incorporate mass collaboration in the way it operates, and how relations between the community and formal organization should be defined. The central issue is that organizations in most of the cases are finalized (characterized by their own objectives, which do not necessarily coincide with those of the people who participate in the organization itself) and are traditionally committed to hierarchical structures to guide and direct behavior groups and people to the defined goals.

Regarding the functioning of the community, a first important element is the *purpose* of the community. Even for those of the consumer world, the presence of a purpose gives meaning and continuity to the community. But in the world of the organization must aim to be consistent and functional objectives of the organization, and must be defined by the leadership of the enterprise.

A second element is *motivation*. The shared purpose and perception of the own contribution are fuels that lead individuals to participate, interact and contribute. Moreover, the collaboration itself becomes a factor of orientation behavior and social control.

2 Bradley, Anthony J., McDonald, Mark P., The Social Organization: How to Use Social Media to Tap the Collective Genius of Your Customers and Employees, Boston, Harvard Business Review Press, 2012 3 McKinsey Global Institute, *The social* economy: Unlocking value and productivity through social technologies, luglio 2012.

A third element is to constitute the extent and visibility of *results*, which play a key role both as motivators and as feedback for the re-orientation of the work of the community. Concerning the application areas of mass collaboration, is a fundamental task of the organizational leadership to define the *vision* and strategic approach, taking into account the level of maturity of the organization, the characteristics of the organizational culture and attitude in the use of social average. All these factors together, as Bradley and McDonald² say, constitute a roadmap a coherent set of aims, that goes in time hand in hand with the evolution of the community. Moreover the aim has not to be top-down and static, but is the community itself that adjusts it and refocuses it according with the changing of context and needs.

The new models based on mass collaboration, communities and self-organization, promise dramatic improvements in performance, value creation, flexibility and innovativeness. There are many success cases already.

A McKinsey report in July 2012³ states that the use of social media, inside enterprises and between enterprises, has the potential to increase productivity by 20-25% of highly qualified knowledge workers, whose contribution is most critical for performance and growth.

 $\mathsf{CHAPTER}\ \mathsf{TWO}\ |\ \mathsf{How}\ \mathsf{collaborative}\ \mathsf{economy}\ \mathsf{triggered}\ \mathsf{collaborative}\ \mathsf{processes}$

Companies and crowdsourcing

2.2.1

If professional communities allow the sharing of information and knowledge, the next step is remote collaboration: the crowdsourcing.

The term was invented by the American journalist Jeff Howe merging the words crowd and outsourcing. It defines every situation when an enterprise or an institution turn to a not organized community to develop a project. An emblematic case, how Howe writes in his book Crowdsourcing. Why the power of the crowd is driving the future of business, is Wikipedia, the online encyclopedia that is born and is developing thanks to the collaboration of millions of people. Another famous example is Life in a day, the movie produced by Ridley Scott, that collected segments of videos from more than 80 thousands people to narrate life all over the world on the 24th July 2010.

Also companies are using this tool more and more to discover new ideas or to find creative solutions. The first examples were narrated by Tapscott and Williams^{*}, their book opened with the story of the Goldcorp Inc., a small company based in Toronto that deals with gold mining. In 1999 the CEO of Goldcorp, had attended to a talk at MIT on Linux. He was impressed by this example and decided to follow it, applying the same model to his company, at that time on a crisis. He took a very critical decision in a sector which the confidentiality is considered fundamental: he published all the geological data that the company possessed and launched the *Goldcorp Challenge*, with money rewards for 575 thousands

dollars. One thousand of "gold diggers" from 50 different countries took part to the challenge: not only geologist, but also advisors, mathematician, officials and students. More than 80% of indicated targets resulted correct, for a total amount of 225 tons of gold.

This is what Tapscott and Williams define as the peer production or mass collaboration: a company opens up to the participation of external unknown professionals with whom share useful knowledge to reach its goals. The difference is given, more than by the organizational simplification, also by the possibility to reinforce connections between among peers in the execution of activities that in the past considered only the labour fragmentation and its distribution to out of touch people.

This is also what distinguish crowdsourcing from social network for freelances or microworking: it is not limited to work fragmentation among people that work autonomously one from another, but stimulates collaboration among peers.

CHAPTER TWO | How collaborative economy triggered collaborative processes

CASE STUDY

H-FARM | DIGITAL TRANSFORMATION

key features



H-FARM | DIGITAL TRANSFORMATION

Digital Transformation is part of the H-Farm company. To be more precise, it is the part that deals with the crowdsourcing and links young potential talents with Italian and international companies.

The core activity of Digital Transformation is the H-ack. The H-ack is a 24-hours call, open to everyone has an innovative idea or wants to challenge himself to create something new. From students, to web developers, web designers, graphic designers, makers, amateurs, they can apply as a team already formed or as individuals that will form a team during the event. In particular, they are invited to work in teams for one day no-stop and to develop a new software that meets the target of a precise company. Could be beverage, health, finance, these hackatons cover almost every field.

H-Farm provides the place to work and rest if some time remains, food, beverage, coffe, internet connection for 24-hours. The day culminates with a projects presentation, where the team are invited to show their ideas with a pitch in front of the company that launched the brief.

The process allows the firms to gain a big amount of new ideas in a very short time, and to participants to get in touch with big companies and, the more skilled of them, to start a collaboration to develop their ideas.

The role of H-Farm is of promoter and enabling platform and can benefits of new contacts and a broader and broader network of clients, that want to become more innovative and technologically advanced taking advantage of the crowdsourcing model. CHAPTER TWO | How collaborative economy triggered collaborative processes

CASE STUDY SLOW/D | DESIGN A KM ZERO

kev features



BENEFITS FOR PARTICIPANTS

fair royalties for designers and artisans



consulting services included



SLOW/D | DESIGN A KM ZERO

Slow/d is a digital platform that opens new paths of collaboration between local artisans and designers. It is a crowdsourcingbased platform: it is open to any professional designer, who want to see his project prototype and sold, and to any craftsman or manufacturing that is seeking for new worthy products to produce.

During the registration phase the user have to choose if he is a designer or and artisan and in the first case he is invited to upload on the website his project. This project will be evaluated from the technical community. It could be also enhanced by another designer or artisan and it is automatically linked to the nearest producer. If the artisan is interested they can start a collaboration to prototype and sell the product.

The designer and the craftsman are in contact through a tool that is called the Prototyping Diary, that they can decide if to set it as public or private, by means of they can collaborate easily in every stage of the prototyping and development.

The platform is also taking care about the intellectual property of the designer with a consulting service, and in the case the product is produced and sold, it will recognize to the designer the 10% of the royalties, and to the craftsman the 10%.

The first artisan that prototype the piece is the one that decide the price to the public. The next artisans that want to produce it will buy sub-licences of production. Of these licences, the 60% of royalties is recognized to the designer, and the 15% to the first producer of the piece.

The products are sold both online in the "shop" section of the website, and locally.

Startups, social initiatives and crowdfunding

2.2.2

The same mechanism of distributed collaboration is at the basis of crowdfunding platforms: the collective microfunding. The advantages are various: artists, creatives, enterpreneurs and artisans present their projects and collect founds from who appreciates them; the clients can express their own opinions on products and services that interests them; the system is open and innovative.

There are five models of crowdfunding:

. reward-based, when the funding is considered a donation and the sponsor gains in exchange a reward, typically a prototype of the product that he contributed to fund, with a discount or in a special edition;

- donation-based, similar to the first one, but a reward is not provided, more NGO projects and social initiatives;
- lending-based, when physical and juridical people can lend money reciprocally with an interest rate to fund a project;
- equity-based, when the investment is done as a shareholding
- hybrid, in general a combination of reward and donation-based models.

In the United States there are many successful cases, as the one of Tim Scharfer, who launched his project of a videogame on Kickstarter and in 7 hours reached his goal, 400 thousands dollars, after a day he had collected a million dollars and at the end of the campaign he had gained more than 3 million dollars, paid by more than 87 thousands sponsors. In Italy this system is attracting the attention of many startups, but cannot count on the US numbers. We need to overtake the cultural opposition to invest in projects promoted by unknown people and we do not have familiarity with online payment systems. But there are also legal problems: if the Jobs Act (that includes also the Crowdfund Act) in the US legalized bottom-up funding initiatives, the EU still did not faced this node. In Europe there are advanced countries, as England or Netherlands, but there is not a EU relevant legislation.

The European Crowdfunding Network was born to endorse the initiative in this area of interest, with a delegation also in Italy, with the vision to " promote and to support the crowdfunding mechanisms as a potential source of fundings for European companies and investors" and "create an more favorable European system for the funding of startups and small enterprises from a broader group of investors.

In the meanwhile in Italy startups related to crowdfunding are reorganizing themselves. They are adopting two solutions to face the mentioned difficulties.

The first is the link with the crowdsourcing: the aim of the community is not only related to gain funds, but it participates actively to projects. As in the case of Cineama, the platform for the creation, production and distribution of independent movies: the crowdfunding is the final step, that can be joined only by who has demonstrated to involve the community in the project proposed. Starteed, instead, operates with the pre-sales formula: it gives the possibility to buy a good or a service before its production, aiding the creator to realize and propose it on the market. The second is the connection with the local or professional community. On YouCapital, the platform for investigative reports, the more successful projects are those capable to mobilize the interested territories through public talks. Others are starting partnerships with universities and consulting services providers.

Waiting for new laws regarding the regulations of these practices, the Italian way to relaunch crowdfunding direct the glance more on the community, than on the crowd. CHAPTER TWO | How collaborative economy triggered collaborative processes

CASE STUDY

KICKSTARTER





BENEFITS FOR PARTICIPANTS

For creators: the model is all-or-nothing



For backers: the model is rewardbased



KICKSTARTER

Kickstarter is one of the most famous and successful crowdfunding platform. It is oriented exclusively to creative projects: from movies, to games, and music to art, design, and technology.

The aim of the service is to give visibility to these kind of concepts, so they can be "backed" and receive the money they need to be developped, in an established amount of time (the time suggested in general is one month).

The model chosen by Kickstarter is all-or-nothing: this means that if the project is not capable to reach the goal in the time estimated.

The model is also reward-based: who pledges a project will be rewarded, for example, with a special offer, or a limited edition of the future project, on the basis of how much is giving, if the project, of course, will reach the target in the estimated time. In case the project finish to collect the money needed, Kickstarter witholds the 5% of the entire amount.Once reached the amount of money extimated to develop the project, the creator must finalize it and fulfill the rewards. The rewards have to respect a specific regulation: they have not to be given in the form of money, or food and beverages, or third part products.

The intellectual property of the project remains to the creator, but all the material uploaded on the platform remains available to the public.

The projects uploaded on Kickstarter can be pledge by anyone in the world. Project creation is currently available to individuals in the US, UK, Canada, Australia, New Zealand, the Netherlands, Denmark, Ireland, Norway, Sweden, Germany, France, Spain, Italy, Austria, Belgium, Switzerland, and Luxembourg who meet the company requirements.

CASE STUDY

LIMONEY

key features



BENEFITS FOR PARTICIPANTS

For creators: the model is all-or-nothing or keep-it-all



For backers: the model is donation and reward-based



LIMONEY

Limoney is another crowdfunding platform especially dedicated to creative, technological, artistic and social project.

This case has been chosen because is an example of a hybrid model crowdsourcing. It is one of the youngest platform, and is different from the previous formulas of crowdfunding, because it combines different models to be more flexible.

The creator of the project can choose between an *all-or-nothing* or a *keep-it-all* model. This because for a lot of projects the crowdfunding is just the online part of the fundraising. In addition the creator can choose both the donation and reward-model.

The plaform provides also a community of advisors that offer a consulting and mentoring function to the creators, helping them to optimize the strategy of the campaign.

The fee of Limoney is of the 5% of the total amount gained on the all-or-nothing projects and of the 8% on the keep-it-all ones. Limoney is an Italian crowdfunding platform, as Eppela, Becrowdy and a lot of others that are based on different models (donation, equity, lending-based).

Different skills in the same place: the coworking space

2.2.3

Digital professional communities, crowdsourcing, crowdfunding: the common point is that they enable distant people, who share an interest, a passion, a work, to collaborate.

The specular phenomena is the coworking: it relates physically one by another different professionals, that do different works, for different companies. The coworking space is defined as a "third" location, beyond house and office, or as a "bridge" location, because it fosters the encounter, the informal exchange of ideas and collaboration, above all among freelances. It is dedicated to "nomad" workers, who do not have a fixed

workspace. So they rent for some time (days, weeks or months) a desk and related services (from the printer to the kitchen, to the shower).

Coworking in Italy is growing continuously, and the spaces are constantly differentiating. Those that are more generic, as the Cowo network, are growing in number. An open model that impose very few restriction to members and coworkers.

Nevertheless, the more interesting aspect is the diffusion of "selective" coworking: the international network The Hub, now present in Milan, Rovereto, Reggio Emilia, Florence, Trieste, Rome, Bari and Siracusa, oriented through social innovation and social enterpreneurship; Talent Garden from Brescia, more oriented to talents in the fields of web and communication; The Collective (now Geekville) that strives for creating a perfect mix among professionals in the area of creativity and innovation. These are different from others because the coworkers are chosen on the basis of a specific project; moreover, they have the possibility to work in co-designed spaces to respond to their specific needs and they are supported by a facilitator. The shared spaces are not only physical, but relational: the goal is to accelerate ideas and projects.

CASE STUDY tag | talentgarden

key features



TIME

flexible, depending on the program chosen





BENEFITS FOR PARTICIPANTS

For companies: discovering new innovation talents and innovation upgrade



For professionals: acquiring new skills and expanding contacts network


TAG | TALENTGARDEN

A virtuous example of a coworking spaces network is Talentgarden. Talentgarden provides coworking spaces in different cities, open 24/7, where professionals can work in an inspiring environment and can meet other professional an collaborate.

- The structure of the company includes three different solution: the coworking campuses, open to the members -;
- the events and education part, that take place in the coworking campuses and can target both whoever or a selection based on the topic of the meeting/workshop/hackaton;
- the innovation school with masters oriented to students that want to specialize more in technological sectors, workshops for employees and corporate innovtion programs.

Talentgarden enable also who wants to open new Talentgarden campuses around the world, providing support and a mentoring service to facilitate the success of the campus.

So, the service provides a both digital and physical platform, even if the digital one is to get in touch with the staff and to have any kind of information about the entire system. It is not enabling online collaboration, because the collaboration happens only inside the campuses.

The revenues of the company come from the payment of the membership, to the tickets for the events, and to the education programs of the innovation school.

Seeking for new talents: business incubators, business accelerators and venture capitals

2.2.4

For many entrepreneurial firms around the world, getting access to external capital is a difficult task, and a shortage of risk capital is one of the greatest hurdles when starting up a new company, particularly in high-tech and high-growth business areas.

The idea that innovation fosters economic growth is broadly shared and accepted among economists worldwide. Therefore, one of the most important challenges for economic systems is to encourage technological innovation among research institutes, universities, agencies, and, above all, companies.

This need originates from market failures and other shortcomings, such as the difficult relation between academic research and business, the lack of innovation services, the absence of a real "market" for technology transfer, and the difficulties connected to the passage from the seed capital to the venture capital stage. The spread of business incubators represents one of the main answers to the needs of emerging, innovative enterprises. The first business incubators were established in the early 1970s in most western countries. They originated from the necessity to fight the social costs of economic slowdown through job creation. According to Lalkaka (2001), three «generations» of business incubators in each store and solve to the set of the set o

incubators can be identified. In the 1970s and early 1980s, incubators were basically providing selected firms with low-priced room and collective services. Then, in the 1990s incubators started benefiting from additional facilities, such as counselling, training and networking services, and access to professional support and seed capital. Finally, starting in 1998, a new incubation model appeared in parallel, aimed at mobilising ICT (Information and communication technology), focusing exclusively on hi tech-based ventures and relying more and more on intangible assets and services.

A business incubator is an organization that acts as lifeline for small businesses and startups to survive and grow during their initial stages. This association provides secured and affordable environment for the entrepreneurs to boost their venture. The business incubator generally offers physical space, consulting, management services, financial and technical support to the flourishing companies. Business owners can also get support with additional services like accounting, marketing and networking, provided by few incubators. The main aim of this organization is to elevate businesses and take it to the next level.

They gather multiple businesses under one roof, providing them guidance, temporary workspace and financial support. However, one addition to the modern day incubators is that they also operate on virtual space. Business incubators serve to an assortment of industries. This is the reason why it is important to find the most suitable and coherent with the business that is intended to start.

Business incubators have been part of many startup success stories. The long list of benefits offered by incubators can indeed be a game-changer for the firms.

- 1. Affordable cost for workspace: the most beneficial aspect about a business incubator is that it provides affordable workspace for the newbies. Entrepreneurs need not have to worry about costly rentals or building costs.
- 2. Shared operating cost: entrepreneurs can be benefited with additional savings by sharing the operational cost with their co-tenants. Business tenants share their overhead costs like expenses related to offices equipments, utilities, conference room etc.

- 3. Strong networking partners: one of the plus points of business incubator is that it offers strong networking, right from the early stage of the business. Many media and tech partners are ready to help the startups and small businesses who have assistance of business incubators.
- 4. Great access to finance: shortage of finance can be the biggest obstacle for the startups. Reputed incubators have good union with venture capital and banks thus tenants can get availed with better financial support.

Incubators offer unparalleled connections with seasoned entrepreneurs, consultants, financial institutions. In other words they are able to establish the connection between the early-stage company and actors as venture capitalists and angel investors. The way of access generally depends upon the type of industry.

- 1. Professional business incubators follow selection process which needs capital assurance from the entrepreneur.
- 2. First, the enterpreneur needs to submit a well-finished business plan to the incubator for reviewing.
- 3. The screening committee would assess the business plan and decide whether it fits the entrance criteria or not.
- 4. Once the screening process is completed and the business gets selected, the entrepreneurs will be charged with reasonable monthly rentals for office space, work equipments and particular services.
- 5. Additional cost will be charged, in case of customized work space.

Incubator is just like business partner, it will follow all the lifecycle of the company, thus is fundamental to look for an organization that is trustworthy and reliable. It is worth grabbing the opportunity to connect with a business incubator as it will help to grow, improve and promote a small business on large scale.

Generally incubators are normally structured as nonprofit organizations. According to the National Business Incubation Association (NBIA), "The most common goals of incubation programs are creating jobs in a community, enhancing a community's entrepreneurial climate, retaining businesses in a community, building or accelerating growth in a local industry, and diversifying local economies."

Startup accelerators, instead are fixed-term, cohort-based programs, that include mentorship and educational components and culminate in a public pitch event or demo day. While traditional business incubators are often government-funded, generally take no equity, and focus on biotech, medical technology, clean tech or product-centric companies, accelerators can be either privately or publicly funded and focus on a wide range of industries. Differently from incubators, they tend to intervene in the adolescent phase of the startup with this short-term programs.

Venture Capital firms, on the other side, make investment into companies. Venture capitalists are willing to invest in such companies because they can earn a massive return on their investments if these companies are a success. In exchange for the investment made, venture capital firms gain tremendous measure of control over the company – ranging from ability to wholly replace the management to even forcing a sale of the company, by refusing to continue investing into the company. But beyond simply exerting control, the venture capital provide tremendously valuable help to the startups in form of:

- Access to its contacts: the VCs have broad and often deep contacts within the respective industry, which can be of great value in various contexts: be it business development, market research, or negotiating exit transactions.
- Assistance in recruiting and building the necessary team talent be it engineering or executive management.
- Providing strategic advice, which can be critical in the very early stages of a startup.

CASE STUDY

H-FARM | H-CAMP

key features



H-FARM | H-CAMP + CORPORATE ACCELERATION

H-Farm offers two business acceleration programs. One is oriented to young, visionaire, creative startuppers, the other is oriented to companies that want to introduce invest in innovation and need fresh ideas.

The first solution is called H-Camp: twice a year H-Farm launches a *call for ideas* and select ten among the most promising startups and offers them:

- four months of acceleration,
- provided workspaces in a dedicated open space
- Room&Board: reserved accomodation with breakfast, launch and dinner included,
- mentoring & tutoring activities,
- facilitated condition to use the technical partners' services
- a demo-day where every startup will introduce itself to the strategic and financial partners,
- an important network of contacts, nompanies, managers and visitors.

At the end of the camp, the startups can decide to remain inside H-Farm renting the space, or, if they are particularly promising, the company can decide to lengthen the permanence of the startup, also covering the expenses.

In return of the acceleration program and of the initial investment, H-Farm holds the 10% of the company, in case the company become profitable on the market.

The second solution, the Corporate Acceleration program, offers a study of the strategy and of the company brief, that opens a call to recruit the best startup at an international level. Once the startups have been selected, they can take advantage of four months of acceleration inside the H-Farm campus and dedicated events and meetings with the company.

Final insights

2.3

There are a multiplicity of cases, branches and developments for each one of the tools that have been investigated in this chapter. The cases were selected on the basis of some traits that distinguish them from the thousands of other cases that are flourishing everywhere.

All the models and tools previously analyized have common traits, pros and cons that characterize them.

Digital transformation with the hackaton model, as a crowdsourcing example, was selected for its capability to match any kind of professionals and enable them to produce a huge amount of ideas in a very short period of time collaborating together.

The advantages of this model are the possible new connections between companies and talents, the right worth and reward given to innovative ideas. This all happens thanks to a company that operates through a consolidated model and know how to select ideas and to manage this kind of events.

The cons, on the other hand, are that in sucha a short time a lot of valuable ideas, probably, do not have sufficient time to be developed to convince the client. There is not any rewards for the participants who do not win, that are all dedicating a lot of effort for free. **Slow**/**d** was selected for the very specific target it is addressed the service. It is very difficult now for product designers to emerge and to have a project in production in a renowed company, especially in Italy, and often the royalties paid are not fair.

The advanteges of this platform are that it works for quality of the design and of the manufacturing, the sustainibility of the process. For example, for both who designs and who wants to buy a product, the system link the project or the buyer to the nearest local artisan. The projects are improved by a technical community and this aid the designer to have in production the best possible prototype. In the end the intellectual property is protected and the roialties are higher that in a traditional furnishing company.

The cons of the system are that it is very closed and dedicated to the professional and also for the designer the system misses that function of visibility provider, that other platforms, less selective have.

Kickstarter is one of the most consolidated crowdfunding platform, as Indiegogo, and it has been investigated because of its special dedication to creative and technological projects.

The advantages of this system is the extreme openness, and the visibility that it could give to a weel-presented project, allowing it to reach the needed funding in a very short amount of time.

The cons are that only perople from just a selection of countries can propose their projects on the platform (probably this is due to a non-uniform international regulation about this kind of platforms).

Limoney was examinated because is an Italian example of a crowdfunding platform. Moreover it is newer than other more consolidated examples, but it had the possibility to learn from the more mature experiences and to improve the model.

The advantages are the extreme flexibility of the system: the creator

can choose the solution of funding that fits better to his project. In addition to this, the creator can also benefit of a consultancy service to improve the marketing stratetgy and the efficacy of his campaign.

The cons of this example is that, probably the platform is addressed to a multiplicity of initiatives, without focusing on a specific field. The result is that the platform is not attracting people or companies seriously involved in those specific fields, so also the visibility for professionals is a bit compromised. But this feature underlines that every creator needs to choose carefully the crowdfunding platform that fits better to his project.

Talentgarden is not a common coworking, in the more diffused conception of the word. It offers a range of services to the members that differ from other approaches.

The advantages are that it offers an international network of campuses, where the spaces are truly optimized for this way of working and the connctions with the companies are for real possible, because the same companies are also clients of Talentgarden.

The weak point here is the digital platform: it is not possible to access to every area of the website and to understand properly what is going on in the nearest coworking campus. Or interact with some of the actors.

H-Farm, with its acceleration programs, is a very renowned and well-structured case of business accelerator present on the Italian territory.

The advantages are differents: the wide range of services offered to the startuppers that participate to the program and the network of important companies that they can interact with are just few of them. The cons here are just due to the location: Roncade is, for sure, good positioned in a region that can offer a lot to these kind of early-stage companies, but it is completely lost in the nature and far from other possibilities of visibility that one can have in a bigger reality. The context is good for the acceleration, but probably is too much disconnected to the rest of the Italian reality to prepare the startup to move its first steps alone outside H-Farm.



WHAT IS THE SERVICE?

WHICH IS THE AIM OF THE SERVICE?



HOW MUCH TIME LASTS THE SERVICE OR PROGRAM?



WHERE IT TAKES PLACE?



WHO IS INVOLVED?





ITALIAN TRADITION vs GLOBAL INNOVATION

"Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit..."

Introduction

3.1

After the analysis of case studies on new innovative tools and models related to the concepts of sharing and collabortation, both Italian and international, we will take the move to explain more specifically what is the stuation in Italy.

What it does mean social innovation in Italy, if the sharing economy exists and it is appling to our way of living, and how is influencing the companies' strategies.

How are changing the perspectives, not only for enterprises, but also for individuals, freelances, creative workers, specialized workers. Is it really true that in Italy there is less work, or is it just that are changing the companies' requests and needs? How institutions are foolowing this shift in needs with new regulations?

The focus goes also on the industrial production firms, how they are facing the crisis, what they are becoming now.

Italy is the ountry of the industrial manufaturing districts, and how this reality is strictly linked to the territory.

As we already know, innovation is the key factor to be more competitve on the market, in this globalization era. It is true that Italian companies, especially in districts as ceramic and biomedical, are investing a remarkable amount of money in research, engineering and technology. Nevertheless this is probably not enough. Our equipments are so technologically advanced, that in most of the cases, our companies sell them also to the competitors. So, probably the shift must be done effectively in the companies strategy and mindset.

The aim is, for sure, to survive, and be more profitable, maybe also being sustainable for the environment to save money and not breaking any law. This goal could be reached thanks to the quality and the know-how that we accumulated with a lot of working experience.

The easiest way is, for sure, to continue to do things as our ancestors did, but this approach will never let companies become competitive and let them remain at the top quality level, that we are now. Fresh powerful competitors are arising and we have to stay at the same pace at least, one pace ahead would be better.

We will go deeper in this analysis, putting the Italian ceramic district under the magnifier, to see closely how Italian investments in quality and innovation of the industrial processes stem the damages of the crisis and let the district hardly survive. Moreover the situation is stable now, but the sector is not growing.

It goes without sayng that this can be enormously amplified, if only the companies'strategies will consider to be opener to the dialogue to who, probably do not have the experiential know-how, but can contribute with a better knowledge about design research, with a fresh mindset and a different point of view on the projects and production lines.

First moves of social innovation in Italy

3.2

People are use to think to real innovation as something that happens in influential structures as universities and R&D departments of big companies. There professionals are at work to exploit new technologies and high level competencies with the aim to create new benefits for the whole society. The government is the figure designated to find solutions for the social issues, like social services, the healthcare system, economical and development policies. And, in the end, parties, social movements and labor unions are appointed to influence the government, representing the community needs. However it is clear that all around the world, things are not functioning with this clear separation of the tasks. Also in Italy, in the last few years things are changing constantly. Innovation is not anymore a commercial one, regarding new products and consumption goods.

The majority of radical innovations are, indeed, social innovations: the raising of new social media as Facebook that allow new ways of engagement, or to organize projects and to keep in touch with the others. Brand new platforms are born, that merge a plurality of services in only one device, now are within everyone's reach. They are not anymore a prerogative of big companies, institutions and big research centers, but they are incorporated in the daily lives of small companies, self-organized communities and last, but not least, individuals, enabling them to get in touch with others and collaborate. Multinational corporations are discovering the potential of this socialized innovation and there is an attempt to capture it with strategies based on open innovation or user-centered design. But, at the same time, there is the perception that the real economy is acting like an obstacle for innovation, strengthening the control on common knowledges with patents and other forms of intellectual properties. There is a stronger and stronger impression that big companies are trying to divert the focal point of innovation.

The Italian government is also also facing a critical situation. As for now, it has no interests to solve the social issues of the country, that are becoming more serious day after day. Difficulties are about the young unemployment rate, job and existential insecurity, lack of public services, like garbage management, healthcare, environment deterioration. Research and development, - technological and commercial -, in Italy are not run at a global level: the the lack of investment and specific policies dedicated to this sector is forcing also public institutes of excellence to close down. The only form of innovation that is keep on working is the one of the small companies that run it individually from the system. For this reason, for instance, Italy produces the same quantity of patents as Switzerland, with a population almost nine time bigger (source: WIPO - World Intellectual Property Organization).

Nevertheless, this stagnation feeling is more apparent than real. Behind the economical and political structures passivity of our country there is an hidden wave of creative energies, especially through the youngest generations. To be more precise, we are talking about people that are less than forty years old. These part of the population is grown up using new technologies in the daily life, so they can understand what does it mean to be part of a network, to collaborate and to work remotely with others. A remarkable part of them went spending some time abroad, with the hope to find better possibilities.

The world of work transformation in Italy

3.3

In the last years the labour market in Italy has came under severe legislative interventions that modified its structure and its intrinsic nature. New dualisms have risen, totally different from those that had characterized the debate in the Nineties, based on the dichotomy "insider" and "outsider", in other words between guaranteed and not guaranteed work, or between manual work and intellectual work, or between male and female work.

Nowadays these dichotomies have mostly disappeared, thanks to new processes of valorization more and more cognitive-relational that exploit the commodification of the entire life. With the II act of the Jobs Act (December 2014), that completed the act I (May 2014), every work became precarious, or "outsider". It changed the perception also about works where some legal guarantees are still actual. Also the dichotomy between self-employment (I,II,II generation*) and employment is becoming more and more subtle. Thanks to the redefinition of a labour market that will follow three directions - apprenticeship for young and less qualified people, unlimited fixed-term contract for the majority of workers, contract with growing protections for the more trained workers -, the institutionalization of job insecurity condition generalizes it as a subjective condition of the existing workforce of every kind.

It follows that the traditional division of work (labour class/clerical workers, employer/self-employer) tends always more to be replaced by an emerging cognitive division of work. This swings between cooperation and hierarchy elements, and between individualization

NOTES

9 In Marx economical theory, historical process in which capital, by virtue of the property that it has on the working ability of manufacturers, subordinates every form of material production, first by changing only the social conditions of its execution (formal situation), that is essentially the work duration, thus transforming his own material conditions (real sit.), namely the organization and production techniques historically given. (Source: http://www. treecani.it/vocabolario/sussunzione/) 10 The aim is to create professional and educational conditions to have access to an employment.

and socialization processes of labour. Two main factors emerged from this context: merit and reward. These are pushing a new form of dichotomy and division that is deeply conditioning the new labour market. The risk is that the result of this process could be strengthening of the job insecurity trap as a tool of governance and vital subsumption⁹ for the capital.

Today the world of work is divided between who is or is not worthing (merit) and between who has or has not success (reward), independently from the activity or the productive context. The risk of this process is an extreme individualization of work condition, although the work is done inside a reality of social cooperation. This cooperation that is becoming more and more the main resource of a surplus that is not distributed, but simply expropriated and manipulated to become income.

Far from being conscious of this new dimension of labour, workers concentrate on insane individual competition induced by job insecurity. New powerful businesses are rising: coworking spaces, for instance, give the illusion to workers of being less lonely and alienated. Training and specialization courses are organized with the attempt to have access to higher levels of knowledge, with the hope to receive a higher reward. For these reasons work environments are developing always more characterized from an economy of pledge that in most of the cases is just an economy of the illusion. The direct consequence is that work is changing in unpaid activity and the promise to obtain work in mere not paid "employability".¹⁰

Rather than work as Fumagalli supports "it would be necessary to engage in welfare and social security, to tackle the growing work fragmentation. It is not just about extending protections to who do not have any of them today (freelances, VAT number possessors, occasional workers of every kind). It is about recomposing the fragmentation under a minimum income guaranteed for everyone, at least equal to the partial poverty threshold. This condition is essential to enable people to refuse a job if it is vexatious or blackmailing."



NOTES * *Wired* Italia, February 2015

OCCUPATION IN ITALY: JOB OPPORTUNITIES AND OPEN POSITIONS

According with a study published by the magazine *Wired**, in this section it will be take into consideration what is happening regarding job and companies in Italy, trying to give a critical interpretation of data. Wired analyzed a sample of more than 948.000 online job offers collected by the startup Face4Job in 2014: the result is that who invest in the integration of his own education has that extra oomph on the market. The 47% of the offers comes from sectors led by hi-tech innovation. The 42% of this part is from the It sector, but an important percentage is represented also by engineering and manufacturing (28%). The remaining 30% is formed by offers from digital, financial and healthcare sectors. With the highest competences requirement and the highest incomes offered, the smallest section is from biotech sector. After getting in touch with the thirty more influential companies of the different sectors, Wired had counted at least 6000 open positions, only in these companies. So why, inquires Wired, the unemployment rate for young people in Italy has doubled from 2007 to 2013, especially in the South, where it overtakes the 40%?

According to what came out from the analysis, the main problem regards education, especially from the point of view of the capability to innovate. In Italy the skills demand of companies is not aligned with the competencies of who is approaching the market. Different researches of international expert advice companies, i.e. Studio ergo Lavoro of McKinsey, have highlighted that the competencies of young graduates are evaluated from the 70% of universities appropriate to approach work, but are evaluated the same only from the 42% of companies. Even if in Italy there are less graduates than in the others European countries (21.6% of people from 25 to 29 years old against 35.8%) finding a job for them is harder in our country. This is probably due to our education system, scarcely oriented to the market. A symptom of this reality is that, at the moment of choosing which faculty attend to, only the 38% of the students knows the job opportunities situation, and only the 30% of them is acquainted with the wage level.

The real challenge in Italy is to bridge this big gap between demand and offer of specialized work. If our country will not be able to fill the gap, it will loose the opportunity to innovate and launch a new period of growth. NOTES 17 Ardvisson, A., *La solidarietà debole*, www.doppiozero.com, 8 March 2015

Sharing economy: what it means for "creative" workers in Italy

3.4

In the last years, many have seen in sharing economy a supportive and community answer to the individualism of the neoliberal market, that is in reality a situation of wild competition that involve the majority of who belongs to the middle-class, compelled to work as a freelance.

"Sharare" - as it is now used as a verb in Italian - is not only a new way to share resources in an increasingly difficult economic environment, but could also be a new way to compose the network of relationships that can act as a counterweight to the market logic, giving rise to new values and, causing a revival of the left wing politics by now deeply asleep. Probably because, as Ciccarelli observes, in Italy it is growing the world of mutual assistance, but only a little of this is due to the sharing economy. On the contrary, it is surprising how, within this context, there are scarcity of examples of concrete solidarity.

According to the dynamics of the sharing economy, you can share material resources which for the moment are not necessary - as the drill loaned to neighbors of social street - or moments of social relations, skills and professional advices. However, rarely this sharing involves tangible financial resources. Above all, the sharing economy does not origins an antagonistic position, as happened to the moral economy of the working class in the last century: it prevails, instead, what it might be called a "weak solidarity", as Ardvisson says.¹

These dynamics are very clear in the co-working spaces: even if it

takes place a continuous sharing of skills, contacts and advices on how to manage customers and create a personal brand identity, coworking is never an alternative to the market. In co-workings, actually, it can be learned how to position themselves effectively on the market. Although coworkers recognize that they are sharing a common situation, (to be precarious and generally underpaid), this awareness does never translate itself in a critic neither to the market as an institution - because responsibilities are mainly due to bureaucrats or politicians -, nor to the market price. It does not exist, as in the labor movement of the late nineteenth century, a conception of the genuine value of work that can help as a basis for a critique of its price on the market. The "weak solidarity " is a market solidarity, an entrepreneurial solidarity.

This is explained by the special conditions of the "creative" freelance work, subjected to a fundamental contradiction: for the nineteenth-century labor movement was possible to conceive that real value of the work was different from its market price, because the value of the product was in some ways due to the time spent to fulfill it.

For a "creative" worker, now, the link between work and value is completely broken. For a freelancer the value of the effort depends, instead, on reputation: an anonymous architect gets an income to the limits of his survival, while an archistar is overpaid whatever he designs. In such situation, the income is determined by the ability to build a reputation that legitimizes a position on the market. However, building a reputation, is an activity comprehensive of all the personality of the co-worker: its interests, its lifestyle and its ability to cooperate with others. In this way the collaboration is not outside but inside the market, the ability to collaborate becomes measurable as a precious criteria for the reputation and, therefore, is handled in a reflexive manner.

In addition, the reputation is not uniquely due to the ability to share social and cultural capital, but also the ability to create a collaborative experience. With the "creativity" of the coworking, the co-workers intend mainly the positive and energizing environment that makes possible to convince themselves, in spite of financial difficulties, that their activities and individual choices make sense. They collaborate by sharing their expertise and skills, but the collaboration consists in creating a positive experience everyday. Above all, they must not create negative energy. For this reason the ability to create positive affectivity is something to look after on a daily basis, as a source of reputation value. This causes that the sociability among the co-workers is almost never becoming collective and supportive. The result is not a community with higher values than the individual ones, the co-creation of a series of experiences where the person can find a confirmation of his identity as a co-worker.

The idea of sharing as co-creating interpersonal affectivity is also reflected in the political philosophy of the coworkers socially engaged: for social entrepreneurs, or *changemakers*, it is important to try to "change the world", but in the end, "change the world" is reduced to change the people who are around, that is quite different from the creation of a collective project.

The "weak solidarity" of the co-workers may seem superficial and certainly does not seem able to achieve alone a political project. However, it is a matter of being in the *early days* and, as occurred with the nineteenth-century labor movement, the possible future conflicts may help also the selfenterpreneurs to turn more collectivist. Or it may occur that a stronger solidarity will develop in other ways. More than just the labor movement, the co-workers look like the "Scottish merchants" of Adam Smith: everyone is on the market thanks to the reputation that he can achieve among his peers and, for this reason, we must act with prudence and propriety. Perhaps the reputation can, in this way, turn into a morality capable of changing the world in a sort of economic ethics in which the creation of both the value and the values correspond.

The Made in Italy production context: districts, artisans and companies

3.5

Starting from 2000s, a systemic transformation in the competitive picture that had allowed the successes for Made in Italy in 90s and 80s pushed Italian manufacturing sector to manage a process of accelerated modernization. These set of scenario changes have forced Italian companies to review their organizational structures and the relations with reference markets.

The first trial has been the introduction of the new single European currency. The impact of Euro was probably underestimate from Italian firms, used to think in terms of competitive devaluation to recover positions on the international market. The new currency imposed a new market discipline focused on innovation and on original strategic paths.

The second challenge was the sudden and complete jump of China on global market. With the entrance of China in Wto in 2001, Europe and Italy, in particular started to face an extraordinary competitor. In some fields as textile, fashion and footwear a high number of Italian companies of mass-production products faced a very hard challenge against the Asian companies.

Another crucial factor has been the technological revolution that changed radically the IT tools for business management. The massive new IT technologies diffusion compelled our companies to rethink in deep their business processes and their consolidated practices.

During the 90s the big companies - in particular US industry - began

an important series of investments on IT technologies to recover flexibility and transparency in the management of organizational processes. At the same time small and medium companies have demonstrated a preference to unconventional ways of management more oriented on local realities. The need of a technological upgrade became urgent between the 90s and the 2000s.

The effects of these scenario transformations were structural for the Italian manufacturing, that was coming from years of growth related to the small company and industrial districts successes. The industrial development in Italy during the 80s and the 90s was determined from the capability of these small activities to work in synergy, from the agribusiness, to the fashion system, from the furniture to the engineering sector. The small firm reality became competitive on the global market thanks to its placement inside these districts, strong of local communities support, that provided a wide range of services, from education to finance. Not a lot of science and technology were at the basis of the majority of companies that became leader of production in their sectors. The success of *Terza Italia* in the North-East of the country was aided by deep artisanal knowledges and community relations.

These industrial districts are nothing more than a territorial area with a high concentration of small and medium-sized enterprises (where the concentration is measured by the ratio between the number of enterprises and resident population), with high productive specialization, generally characterized by an intense interdependence of their production cycles and is highly integrated with the local socio-economic environment that hosts them. This peculiarity is mainly concentrated in the north and in some areas of the center. Ont the other hand, it is almost absent in the south of the peninsula, which had not succeeded in developing, except for some areas such as Puglia and Campania.

Although we tend to associate the craftsmanship with small and medium enterprises, it is important to be able to capture the value that the artisan work has in larger companies. This "artisan spirit" permeates much of the Made in Italy, even in the medium and big business. Handicraft skills are those that enable large fashion and luxury groups to manufacture garments, bags and accessories of exceptional quality to be sold on international markets. Handicraft skills are those of the model makers that allow the protagonists of Italian style to translate their sketches into prototypes and first series on which set in motion the industrial production also in distant countries.

Handicraft skills are, finally, those of the machine tools maintainers that ensure the competitiveness of the Italian mechatronics in the world.

It is true that the Italian industrial capitalism has taken possession of new managerial skills (communication, logistics, design and many more), but it is equally true that entrepreneurs who drive these new companies have not followed the precepts of the 'financial' philosophy that has guided the vision of the Anglo-Saxon management.

The relationship with the product and the production still remains a distinctive feature companies guidance in the fourth Italian capitalism. It remains the passion for making, rooted in a world of crafts and practices that define a social identity. Upon closer examination, the new medium Italian enterprise has not denied the figure of the artisan; has, however, arranged his qualities and proposed his value to an international scale.

It has been able to mix scientific knowledge and gestures of tradition. It has learned to communicate the skill of the masters through the new means of communication.

Unfortunately, only a minority has been able to adapt to the changes, and has managed to evolve into the new artisanal figures that are able to survive successfully on a global scale.

An example of industrial district: the ceramics production

3.6

The Italian ceramic tile sector is distinguished by the presence of a large number of companies in specific geographic areas.

The birth of ceramic industrial districts - the largest is the one of Saassuolo-Scandiano, then there are those of Imola-Faenza, Impruneta, Vietri Sul Mare and of Veneto region - was facilitated by the simultaneous presence of different factors, as centuries-old tradition of using clay to create crockery, paving and upholstery products.

From the beginning of the 50s, the availability of qualified manpower and capitals, in addition to a high demand of products, - due to the postwar reconstruction and to the rise of large suburbs in the north of the country -, led to the development and consolidation of the districts as we know them today. Industry and district, in refers to Italian ceramic production, can be seen as synonyms, for the reason that the 80% of the manufacturing comes from the districts, with a 10% more produced only in Emilia Romagna.

The four sectors that characterized the Italian ceramics production are:

- ceramic tiles, the larger one, with its 156 enterprises, with 20.537 employees;
- bathroom fixtures, with 36 companies the majority of them is located in the Civita di Castellana (Viterbo) district -, with 3.723 employees;







- flatware, 9 companies with 675 operators refractories, with 35 enterprises that occupy 2.125 employees;
- refractories, with 35 enterprises that occupy 2.125 employees.

Today the ceramic sector cannot be defined as one in a booming phase, but it is surely one of the district that has faced best the challenges posed by Italy, a country that had developed quickly in the past, then grew old as quickly.

Furthermore, this is an area that has never had a real competitive advantage linked to the position, because of the highly energyintensive nature of this industry, in a country where energy is more expensive than for its main international competitors. Regarding the raw material, which plenty in the area allowed the first development, it did not have the qualities to meet the product evolution and it was gradually replaced by imported material. It was, therefore, not natural resources, but the adaptability and the human capital, that have allowed districts to overcome the challenges that have come over time.

The challenges faced, and won, by our industry have been many. Just to mention the main, the need to attack the foreign markets, in a first phase mainly European. Then the competitive challenge posed by the Spanish competition, ending with the most complex challenge linked to globalization. Globalization has meant for the Italian ceramic industry to face Turkish, Brazilian and Chinese competition. Globalization has forced us to face more and more distant markets, which could be conquered only occupying more and more high-end market. This capability was based on a leadership that brought together technology, design and adaptability of the process and the product.

Nothing that could not be copied in individual aspects, as in fact happened, but it was the ability to be innovative that has allowed Italian ceramic industry to maintain margins in good years and to survive in the bad years. On closer inspection there are not many "traditional" sectors that have managed to innovate both their production processes and products, while being "forced" into the specific type of product. Invest 5% of revenue in innovation in a sector such as the ceramic is not in fact a negligible element. The continuous progress of the productive sector was also possible by the presence in the district of a formidable capital goods industry to service industry. Nothing in the world compares to the sophistication and variety of our ceramic machinery manufacturers.

Never before, as in the last ten years, the future of the ceramic sector was so uncertain. In the last ten years the Chinese competition exploded and other manufacturers are born, like Turkey, Brazil and the United Arab Emirates. At the same time, starting from 2008 the European market stopped and the Italian fell down. From 2007 to 2013, the domestic sales have almost halved, going from 1.6 billion euros in 2007 to 856 million euros in 2013. Also the value of exports fell by 4.2 billion to 3.8 billion euros, an important, but less significant, drop in value and even more in percentage than the national market.

We are, by now, destined to be manufacturers of high-end market and, if we want to remain strong, our horizon can only be the entire world, with all the consequences that this entails on the size of companies and their organizational model. Already, a third of exports goes beyond the borders of Europe. This is an important fact because it is very difficult to be competitive with a product of this kind, where the transportation costs have an important incidence, on very distant markets. It can be only when you give birth to a product of high technical and aesthetic quality, that its costs of production and transportation do not exclusively affect on it. This feature of excellence will be also a sign of confidence when the times of the anti-dumping fees imposed by the EU to face Chinese ceramic tiles will come to an end.

The number of companies from the period of the highest number has halved while the workforce directly employed declined by over 10,000 units. The challenge of internationalization has been, at least, temporarily defeated if we look at exports and at the ability of our companies to produce abroad. Many of these investment decisions in foreign countries have been criticized, but if they had not been taken, our companies would be much weaker. Italian companies produce in Portugal, France, Spain, Germany, Russia, United States. The biggest part of the fall in exports that has occurred since the early 2000s, the time of maximum expansion in value, now has been filled by foreign productions. This too is a sign of strength and foresight of the sector. A district with fewer companies, with the largest that have become increasingly larger and that are able to tackle global markets, but with the smaller ones that have focused very successfully only on some countries. Others, instead, have managed to create a product that can compete in Europe with Chinese companies that have to bear significant transportation costs to sell in Europe.

Today we are witnessing the last phase of district globalization. A new phase and relatively uncommon in the experience of Italian districts: the shift in foreign hands of some Italian manufacturers. If limited in number and balanced out by our purchases abroad, we can not give a negative evaluation of this further development. Hard to know what will be the further steps. But we can say that there are two ways to deal with it. One is to see the purchase of Italian companies by foreign producers as only an impoverishment, as a sign of an inexorable decline. The second is that, instead, it can be read as an attempt to integrate even more the district and its businesses in global supply chains and to see this as a necessary evolution, almost physiological in the new competitive environment. Integration also means trying to understand and assimilate the strategies of competitors, oversee more and more distant markets with direct investment, increase the size of enterprise and continue to feed the virtuous process that connects ceramic tile manufacturers and manufacturers of production lines. The ability to innovate be fore the others, even just before, is the key to maintain a leading position in the design and then maintain higher margins. A district, then, that it can not be only productive but also must be the logistics center and distribution center of innovation. Essentially a district, if it wants to maintain its central role, must be able to keep in Sassuolo the "head" of the companies
that are bought by foreign operators. This is a difficult challenge, because the head moves faster than a production line, especially if the acquiring companies have a higher dimension and operate with global mindset, and to move production plants or decisionmaking it is always on the agenda. Maintain excellence, the specialties and the bonds of the district is the focal point of our future.

Other open challenges and weaknesses to work on are the frailty of the internal market, the high cost of energy and the generational shifts, that too often have disturbed the enterprises development. In a lot of cases generational shifts have become critical accelerators for mergers among companies. Also the dimensions of the company are problematic and are not to underestimate, they must be accompanied by a change or a strengthening of the management structure.

Other challenges involve the district. In addition to the energy one, which we have already discussed, it must be put more resources in the preparation of human resources, both at the technical school and in relations with the universities of the territory those, especially in recent years, have deepened their teaching skills and research.

Maintaining the primacy of technology and design means to prepare people capable of being the first of the world in both of the tasks.

None of these objectives can be achieved with a strategy of selfsufficient and autonomous district: its strength is to open up and take in the ceramic sector the endless innovations that take place in other areas around the world.



THE CASE STUDY OF CERAMIC FUTURES

"Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit..."

An interface between students and companies: the workshop

4.1

A priviledged channel to connect companies and students or new, fresh intellectual forces and to take advantage from their ability to research and to innovate with a mind not influenced from years of working in a determined field, is the workshop.

There are many answers to what a workshop is. But, in general, a workshop is a single short educational program designed to teach or introduce to participants practical skills, techniques, or ideas which they can then use in their work or their daily lives. And most workshops have several features in common.

- they are generally small, from 10 to 40 participants, allowing everyone to receive some personal attention and the chance to be heard;
- they are often designed for people who are working together, or working in the same field;
- they are conducted by people who have real experience in the subject under discussion;
- they are often participatory, i.e. participants are active, both in that they inuence the direction of the workshop and also in that they have a chance to practice the techniques, skills, etc. that are under discussion;
- they are informal: there is time dedicated to discussion in addition to participation, rather than just a teacher presenting material to be absorbed by attentive students;
- they are time-limited, often to a single session, although some may involve multiple sessions over a period of time (e.g. once a

week for four weeks, or two full-day sessions over a weekend);
they are self-contained. Although a workshop may end with suggestions for further reading or study for those who are interested, the presentation is generally meant to stand on its own, unlike a course, which depends on large amounts of reading and other projects (papers, presentations) in addition to classroom activities. It is also common for workshop activities to include presentations. Unlike conventional classrooms, however, it is not a facilitator or instructor who gives presentations. Instead, each participant or team of students might present on a particular subject. These kinds of workshop activities also help people learn how to work together, especially when they are forced to work with individuals whom they have never met before and with whom they might not have much in common.

People participate in workshops when they want to improve specic skills or acquire knowledge by discussing topics and participating in activities with other people who have similar aspirations. The core essence of workshops is activities, but there are two main types of the aim of workshops. The first type is focusing on nal outcomes in the end of workshops. Those workshops are held to create outcomes in a small given time through concentrated and intensive activities. The second kind is, on the other hand, focusing on activities themselves in workshops. Those workshops are held so participants can learn new things to use them in their daily tasks in school or work.

Workshops combine training, development, team-building, communications, motivation and planning. Participation and involvement of the staff increases the sense of ownership and empowerment, and facilitates the development of organisations and individuals. Workshops are effective in managing change and achieving improvement, and particularly the creation of initiatives, plans, process and actions to achieve specific projects and organisational aims.

Because of this strong effectiveness, workshops are organised in

NOTES

1 Yu Hiraoka, Workshopper, a Product-Service System for workshops, PSSD Thesis, Politecnico di Milano, Design School, 2013-2014

> various environments for various reasons. In school, workshops are often held to train specific skills which are both related to students' course assignments and unrelated to them, or students are involved in a very specific project.

> Themore characteristic part of a workshop is that participants engage themselves in a "laboratory" exercise, a hands-on experience to investigate concepts and ideas which are given by organisers or generated by participants. There are many kinds of workshops, but in most workshops, participants need to produce and present something at the end of workshops. The production can have various formulas depending on the subject of the workshop: mock-up, prototype, presentation, speech, performance, role-play, writing, and so on.

> The activities are very interactive and involve more the "doing" part than watching, listening, and taking notes.¹



Introducing the Ceramic Futures workshop

4.2

In this prspective it positions also the Ceramic Futures workshop. We have already introduced the situation of the Italian production district, in particular of the Italian ceramic district, its strenghts and its lacks, that had determined the excellence and the difficulties that this sector had faced and is still facing.

Ceramic Futures is an opportunity to match worlds completely disconnected, as university and industry.

The workshop was born three years ago from an idea of Stefano Mirti, a visionary architect, with years of experience in the field of education, art, design and social media.

The project is based on an agreement between Confindustria Ceramica association and three or four different Italian and international universities every year. An external agency, IdLab, organizes and coordinates the preparing and execution of the initiative. The workshop is an optional one, and it gives to the students some CFU, depending on the Athenaeum. It is a twomonths lab, whitin the students have to develop a concept based on the project brief given at the beginning of the course and have to prototype it. The two best projects of every schools, then, will be exhibited and presented by the creators to Cersaie, the international trade show of ceramics that takes place in Bologna every year.

The workshop consists of two parts, one offline and the second offline. The offline part involve the group of students of the singular schools: they meet once a week and discuss with their tutor the NOTES 2 from the interview with Elena Romani, representer of Confindustria Ceramica

brief, do brainstorming, research and develop their concepts and prototype them. The online part realizes itself on a dedicated Google+ community, where the students are invited to document their design process, to brainstorm, to ask for help and suggestions to the other students, or give advices to others on their projects.

Every week they are evaluated on the basis of the interaction on the community and there is a ranking, that, at the end of the workshop determines one of the winners per each school. Every year there is also a publication that gathers together the best projects of every school, so the students are invited to produce some high-quality pictures of their products and a short explanation.

The aim of the project is to create a community of young and fresh designer and architects that enter in contact with ceramic, explore its wide range of potential, keeping it in mind as a potential future material for their project. As the representers of Confindustria Ceramica say proudly "the aim is to create the first social media project fro ceramics".²

Stakeholders of Ceramic Futures



PROMOTERS

Confindustria Ceramica		Association of the Italian ceramics manufactures
Jniversities	19 III 11	Every year 3-4 schools of design, art, architecture and engineering sign the contract to take part to the workshop
ORGANIZERS		
dLab	0	Social media strategy and education programs design agency
SPONSOR		
Edicer S.p.A.	$\mathrm{E} di \mathrm{C} er \cdot_{\mathrm{SpA}}$	Society affiliated to Confindustria Ceramica Association
TUTORS		One tutor per each school manage the burocracy and guide the students
STUDENTS		The students come from the design, architecture, art and engineering faculties

Touchpoints of Ceramic Futures





Interaction storyboard: Ceramic Futures service set-up and development

4.5

The two interaction storyboards want to explain which are all the interactions that are occurring in the service set-up and during its execution.

Here we can see which actors are involved, and which are the touchpoints that they need to enter in contact one to the other.

We can notice a preponderance of digital touchpoints, even if the subject of the workshop is really material, and the tasks requested to students to fulfill are mostly practical, also because the final output have to be a prototype to exhibit at Cersaie fair.

This because all the stakeholders involved are geographically far, and this is a very characteristic trait of Ceramic Futures: to link different realities, Univerities with different approaches. In addition, the students are specifically request to collaborate on the Google + community, to educate them to collaborate also in remote, so they can contaminate each others and have a glimpse of what does it mean to work with students with a completely diverse background.



CHAPTER FOUR | The case study of Ceramic Futures



TIMELINE I DURING THE SERVICE

Offering map of Ceramic Futures workshop



In this map the aim is to show what the service is offering now to both users, - the students participating to the workshop -, and to who is an outsider that can be interested to the workshop.

As it can be noticed at the first glance, the value offered by the project is mostly immaterial, in the form of knowledge, support, tutoring, inspiration, information and visibility.



System map of Ceramic Futures workshop



As it can be noticed from the map, the system is quite articulated. It is based mostly on information exchange, because all the stakeholders are far one from each other, and need to organize the work and the workshop development continuously before, during, and after the end of the two months of the effective workshop.

This part is managed for most of the time through e-mails, phone calls and social networks.

The only sponsor of the project is EdiCer, the support company of the association Confindustria Ceramica. It covers all the expenses related to the workshop management and pays tutors and IdLab for their work. In addition to this, the company is the actor that deals with the organization and financing of Cersaie fair in Bologna. However, it does not have anything to do with the relations, the trust and the other aspect of the service apart from the financial side. For these there is the association, with their representatives, that are fully committed to the organisational and relational part of the workshop.

IdLab is the main node of the service, because is the one that mananges the setting-up, and the execution and all the relations among the stakeholders involved.



- -----> EMOTIONAL FLOW
- MATERIAL FLOW
- \longrightarrow FINANCIAL FLOW

Ceramic Futures Business Model Canvas

4.8

From the business model canvas it emerges that the digital part has a very important role in the project. From the key resources to the key activities to the channels to the customer relationship management, almost every element has to do with the internet. This is due, of course, to the geographical distance of the parts involved, in addition to to value proposition "Ceramic Futures is the first dedicated "social" project to engage students in a conversation on ceramics, both physically and **digitally**".

What comes out also is that the service is offered by the universities for free to students and there are no revenues for the sponsor. This because the purpose of the project is purely educational, and the only returnes that the investor has is in terms of image and visibility: for this stakeholder is important to make visible a collaboration with consolidated and trusted institutions.

MER SEGMENT chitecture, art, visual ication, engineering			
ONSHIP CUSTO undents design.ar nal commun re commun ok students ok (mail. (mail. nal.			
CUSTOMER RELATIC personal assistance for stu via e-mail for organization problems by IdLab personal assistance for the students by tutors pertain the projects exhibition set-up and boo preparation by IdLab Universities communicatio institutional channels social network profiles) Confindustria Ceramica at cersaie institutional channels			
PROPOSITION t dedicated al"project ge students nversation eramics, digitally digitally REVENUES			
VALUEF the firs "soci soci on c on c on c on c and			
KEY ACTIVITIES the Ceramic Futures Came the weekly meeting with the tutors prototypes development and presentation coordination among all the parts involved in the service KEY RESOURCES the CF Coogle+ community the CF Coogle+ community the brands. Confindustria Ceramics of Italy. The spaces provided from universities, the courier for the prototypes	the tutors. IdLab personnel. Confindustria representative the money to cover the costs d. publication printing space bersonnel transfer during the exhibition		
KEY PARTNERS Jniversities involved Confindustria Ceramica, adicer Cersale fair crinters and suppliers for the act-up of the exhibition secial networks (Facebook, fwitter, Google+) vebsite provider	COSTS IdLab activities, tutors refun exhibition costs: set-up and : students, tutors and IdLab p		

CHAPTER FOUR | The case study of Ceramic Futures

Ceramic Futures channels

4.9

The digital channels of Ceramic Futures include a dedicated website, that functions as a platform both for students and for outsiders.

For the students it is useful to check every week how the game is going on, and to check their positions, scores and the evolution of their activity on the Google+ community.

For the outsiders, the website provides all the information about the Ceramic Futures project, participants, schools involved and the link to the community and the social network profiles.

The Facebook page and the Twitter profile are mainly for the outsiders that want to get in touch and follow the evolution of the workshop. The target, in this case, stretches from the students of design, art and architecture schools, to teachers, professionals and companies, preferably connected with the world of ceramic. They can just follow the pages, but are gladly welcomed to give suggestions, opinions and tell us if they know similar experiences.

The aim of the social network pages is to extend the public of the workshop and to make it more known and have a bigger international community of people that talk and exchange informations about the world of ceramics. On the other hand, the Google+ community is just for the people engaged in the workshop and is active just in that period.



At the opening of the website HOME. a gallery of projects appears. These are some of Ceramic Futures last edition.





In the SCHOOL section there are the links to the institutional websites of the participating Universities.











What happens inside the workshop is deily reported on the Facebook page, together with inspirations and news about the world of ceramics.



From the analytics emerges that the public of Ceramic Futures are mostly between 25 and 34 years old, even if the participants are also between 18 and 24 years old.

So, probably we have to do with students or young professionals. The presence of "People Engaged" is significant also between 45 and 54 years old, probably professors and people from the ceramic factories.





Promoted by Sky Sport MotoGPT#

Trends - Owner

There is no profile of Ceramic Futures on Instagram, but there is an hashtag (#), that pertinent pictures that students, tutors, and the other advisors post on their personal profiles.



SWOT analysis of Ceramic Futures workshop and final insights

4.10

There are a lot of good points in the core values of Ceramic Futures. Firstly, the actors involved are important and influent in the sector of ceramic industrial production.

Confindustria Ceramica is the association of the excellent Italian industries for technological innovation and quality. The factories that we can be proud of at an international level. The Universities involved are strategic point of reference for design, architecture, art and engineering in Europe. In the end the students selected to participate to the workshop have to be strongly motivated and capable in what they are studying.

The experience is at his third edition, so, we can say it is a consolidated format that functions as it is now. The quality of the output speaks by itself. The final exhibition, moreover, gives to the students the possibility to gain visibity by international companies of the ceramic field, because it is hosted by Cersaie, one of the most important event of the ceramic world at a global level. Finally it is a free opportunity open to every student of the selected Athenaeums.

Nevertheless, all of this potential is not exploited completely. The students, in the end are never entering in touch with companies for real, except for the visit to one the factory, when they can have a glimpse of what does it mean to produce ceramics at an industrial level. But then, they cannot count on a proper technical tutoring activity from them, so the result is that they end to design products that are futuristic and not really focused on the Italian ceramic

the first "social" project on ceramics is strong of three years of experience and trust among the parts establishes a contact between traditional industrial sector and young designers

it is free for the students of the partner schools

STHONAGHTS

the companies involved are willing to be more international market competitive on the

to make the service more appealing for all the parts there are strategic tools

SJUIN NILLO an open and fresh approach there are know-hows and experience on a side, and on the other side

there is no comprehension of the benefits that a design led ine can add to the traditional approach to the production

to risk an investment, even if it is small

companies are not willing

students and companies is not strong enough the link between

appropriate communication the project lacks of an to the outside

innovation inside the system <u>CF is not finalized to bring</u>

NHE AND challenge for participants there is not a true, relistic

system

companies take advantage Italian young talents go abroad, where foreign of their competences

SIVIZATI

ഗ

production. And that are closer to the artisanal products. This fact make all the students' projects beautiful experiments that remains stuck at this early stage of development.

The website of Ceramic Futures is not a proper "platform". It only provides some general informations about the project and the participants, and it is a tool for them to check periodically their personal activity on the community. It is not creating engagement for the outsiders who are interested in discover and know more about the project. The project could potentially perfectly work also without it.

The Google+ community is not a very immediate tool to use, for all the people involved in the project, with the consequnce that the participants are not very pushed to use it. They barely use it during the work in progress of the workshop, and it is in stand-by for the rest of the year.

The same can be said for the other social network profiles and pages, that end to repeat for the outsider what the community is saying during the workshop, plus just some other top-down contents.

In addition there is not a real challenge for the participants, because the reward is just in terms of visibility. They could be much more pushed to give their best if only they can foresee some future further steps of the winner projects.

Exactly for the big inner unexploited potential of Ceramic Fuures, a wide range of opportunities opens up.

There are a lot of tools that are spreading more and more in the last period that can be used to add value to the service. Firstly, the service needs to be refocused to become something more useful and valuable for clients. It is not enough anymore to create a "social" conversation around ceramic materials among young people.

Moreover there are experiential knowledges and design approach
that are never touching and "contaminating" reciprocally.

The biggest threat of the system is, for companies, to not be able anymore to recognize when an idea needs attention, losing it irreparably. This attitude will lead enterpreneurs to be always more stuck in their stillness, continuing to invest in technological and engineering research and not in fresh ideas and creativity. This will lead them to become less competitive, having a lot of technology and not using it at its best. This escluding the fact that we risk to lose all of our best talents that, frustrated by the situation in our country, will look away in favor of some other context capable to understand their worth.



CERAMIC NOW: A WORKSHOP REDESIGN FOR A FEASIBLE FUTURE

"Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit..."

A different kind of experience

5.1

The aim of this redesign project is not to change the actual status of things regarding Ceramic Futures workshop. It is an experience that was born with a precise format and a precise aim, and it is well functioning for its aims as it is now. The students have the possibility to experiment and share skills, with a very material approach.

The total design freedom that characterizes this workshop is some fresh air for who of the students of the different schools has a more technical and theoretical approach, and for all of the students is a very good exercise to express theirselves, receiving feedbacks not just from professors, - a very typical way of academic studies -, but from other students, in a peer-to-peer model.

Ceramic Now takes the moves from Ceramic Futures and share with it the core values, but want to propose a different experience both to students, clients and outsiders.

It wants to trace some useful guidelines and to become a format for other similar experiences that will deal with other industrial production district than ceramic one.

A good metaphore of what it wants to be offer with the new system, could be "dreaming, but with one foot on the ground". The intent, here, is also to provide students of some hints of what could mean introduce a project to a company in a very competitive world that is still quite suspicious about what it does not know perfectly and it is not used to. And it is not possible to change the mindset of people in a day, especially if it originates from years of practical knowledge and habit. However, with gradual step by gradual step, the change could be possible. This is the focal point which the project rely on.

The project traced in this chapter is the result of a deep involvement in the Ceramic Futures workshop, observation of the dynamics as not only a shadow, but an integral part for the execution of the workshop and a dialogue with all the actors participating at the project. This possibility gave to me the opportunity to appreciate the traits of the project, but also to develop a critical and conscious viewpoint on the entire picture, collocating it in the wider scenario of transformation that was analysed in the previous chapters.

Stakeholders of **Ceramic Now**

5.2

PROMOTERS



Touchpoints of Ceramic Now





Interaction storyboard of Ceramic Now

5.4

In this section some improvements to the service have been proposed. The workshop set-up remained quite the same, because the procedure is already rational and functional to the service. The added point, that wants to valorize more all the process is the introduction of a new figure: a representative of one of the most excellent and virtuous companies in ceramic field, chosen by Confindustria Ceramica. This figure will enter in contact and create a mentoring relationship with students, providing them the technical support that they need.

Regards to the proper execution of the service, as a pilot project, the students and tutors will be host to the partner company for the visit to the factory, and this company will have a decisional role together with IdLab in the brief definition.

The workshop period needs to be moved earlier in the academic year, better from March to May, than to May to July as it happens now in Ceramic Futures, in order to not interfere too much with the examination session. This change allows also student s to have much time before Cersaie to refine the prototypes and prepare an appropriate pitch for the presentation.

To make more powerful the digital collaboration among the schools involved, they will have mandatory online deliveries where the students will be invited to explain their ideas and receive feedbacks and help from the others. To make stronger the relationship among students of the different schools, at the half of



CHAPTER FIVE | Ceramic Now: a workshop redesign for a feasible future



CHAPTER FIVE | Ceramic Now: a workshop redesign for a feasible future



the workshop they will all gather in one of the Universities for a three-days intensive Design Jam, where they will work together on their projects.

The publishing of the book will be done just online, providing a QR-code to the visitors to guarantee a broader diffusion and a wider spread of the project, through the digital version.

The workshop will still end with the showcase at Cersaie of the best projects. The presentation will be done in the form of the pitch, to improve the educational part in presenting a project to a potential investor. At the end of all the showcases a final winner will be announce.

Here is the new part of the project, that wants to give a physical reward to the winner.

The new service follow-up consider an after-workshop part where the winner will be mentored to prepare in the correct way a video presentation of the project to launch it on a crowdfunding platform, with the aim to collect money to cover the costs of a small production of the winning project by the partner company. If the process results successful, the product will become something real and will be included in the company's catalogue.

The role of IdLab is important also in this moment: the agency has to take care of the promotion of the project on the website and social networks profiles of the workshop. This action guarantees a continuty in the discussion about ceramic materials in the creative fields, a growing attention around the possibilities opened from the workshop for both sides, industrial and educational worlds. A strategic point regarding te social networks' public is to not leave the profiles asleep until the next edition of the workshop, but to keep them active through time to not lose the public, and eventually, to make it grow, if the subject is worthy and successful.

Offering map of Ceramic Now workshop

5.5

As we can see in the infographics, the basic structure of the offering remains very similar to that of Ceramic Futures. However, in every branch of the first level has been introduced a new point or some of the old points changed.

This process is important because, as emerged from the SWOT analysis of the previous chapter, the pre-existing structure was already well designed, but not all the channels, for example, are optimized and fully exploited. In addition, the offring became wider, to give students a truly possibility to collaborate with a company and to obtain the best from the collaborational part of the system.

Introducing a Design Jam in the middle of the workshop is also a way to create and reinforce relationships among students of different schools, allowing them to intensively work, but also have fun and try a completely new experience for most of them.

The communication part has been also improved, in order to involve a greater number of outsiders, those can be interested in following the workshop, and eventually funding the winner project, if they find it worthy.

Some tools on the website has been added, to make it more useful also for external users - other students and professionals, for instance - , that can find also a resource of information for their project. This also will give a boost to the digital "conversation" about ceramics and promoting it more.



System map of Ceramic Now workshop

5.6

The system map shows that the basical structure of the flows during the service setup, the execution and the after-service are mainly of the informational kind. This prevalence can be attributed to the inner nature of the project: it is, in fact, an educational service, for all the actors involved.

As it can be noticed here, two new actors come on stage: the partner company, that has been gradually introduced, and for now it is not requested to finance anything. The only flow involved is an informational one, due to the technical mentoring activity. The follow-up activity of engineering and production of a small series of the winning project will be found, in case of success, entirely with the crowdfunding.

The decision, in case, to finance the project anyway is left to the company.

The other new actor is the crowdfunding platform: this has to be chosen carefully, because each one of them are more or less suitable for each kind of project. Probably a good one could be Limoney, because is addressed to creative projects and it gives also the possibility to select the keep-it-all formula.



- -----> EMOTIONAL FLOW
- -----> FINANCIAL FLOW

Business Model Canvas of Ceramic Now workshop

5.7

The business model canvas wants to show the new value proposition of the workshop: "a platform to engage companies and students in an innovative ceramic design project with a digital and physical approach".

The key activities are integrated with the mandatory online peerto-peer reviews, in order to make everybody become familiar with the Google+ community, understanding the importance to document the whole design process and exchanging suggestion and improvements with the other participants.

Another important key activity is the intensive Design Jam. During this session students will improve their collaborative skills, both if they are working in teams and individuals. All of these key activities are related to key resources, but, as in the case of the Jam, the key resource of the Universities spaces will be just exploted more than usual to host the students.

The technical tutor will be a new fundamental strategic partner for the project: he will be available for all the technical question of the students related to the ceramic materials, with the opportunity to enter in contect with them, and to do, secondarily, a scouting activity to individuate the most promising students.

The crowdfunding platform and a more effective website and social networks management will be the priviledged channels make the service more useful and powerful.

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Finally the revenues: in the previous model it was not forseen any revenue in the system. The aim, for the clients, was just create attention around the ceramic world from design and architecture world and to show proudly a collaboration with important international Universities.

In the service redesign, at the very end of the process, if the crowdfunding is meaningful to start the production, and the company and the system created are able to attract attention on the new product, the project could become profitable at a money level, both for the business and for the designers.

Ceramic Now workshop online platform

5.8

In this paragraph is illustrated how the new website can work. There are included three new sections.

The first is about the news regarding the workshop progress and it will be used also to raise attention on the crowdfunding campaign. It is a blog-alike section and will include multimedia contents, like pictures and videos about the physical meetings inside the different schools and the communication and advertisement about the crowdfunding campaign.

The second brand new section is the one that includes the database of materials. This is a supporting design tool for the students involved in the workshop and for outsider that need informations about ceramic materials for their personal project. The intention, here, is to push further the spreading of ceramic materials in design and architecture projects, one of the main goal of the clients. The database is available for free and everyone can take from here precious informations about the ceramic typologies, the "ingredients" that compose them and the possible applications and industrial processes.

The third new section wants to replace the personal profiles of each student. Instead of having a singular page with their evolution during the program, they will have a general overview with all the participants, updated every week. Also the key criteria have changed. Instead of having criteria based only on the G+ community activity, they will be evaluated from the other students during the weekly peer reviews, from the tutors after the weekly meetings and after the Design Jam.

This new system of criteria allows to establish a fair and transparent evaluation during all the stages of the workshop.

There will be integrated also a section with a gallery of previous years best projects of the workshop.

The sections of the "about" and the "schools" presentation are kept, in order to provide useful information on the experience, also in case other schools are interested in the participation to the next editions of the workshop.



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MATERIALS DATABASE

PEBBLES

A **pebble** is a clast of rock with a particle size of 2 to 64 millimetrevs based on the Krumbein phi scale of sedimentology. Pebbles are generally considered larger than granules (2 to 4 millimetres diameter) and smaller than cobbles (64 to 256 millimetres diameter). A rock made predominantly of pebbles is termed a conglomerate. Pebble tools are among the earliest known man-made artifacts, dating from the Palaeolithic period of human history.

A beach composed chiefly of surface pebbles is commonly termed a shingle beach. This type of beach has armoring characteristics with respect to wave erosion, as well as ecological niches that provide habitat for animals and plants. Inshore banks of shingle (large quantities of pebbles) exist in some locations, such as the entrance to the River Ore, where the moving banks of shingle give notable navigational challenges.

CHAPTER FIVE | Ceramic Now: a workshop redesign for a feasible future





FUTURE STEPS AND CONCLUSIONS

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Future steps: after Ceramic Now

6.1

Ceramic Now is conceived as a pilot project for a new typology of workshop that has the aim to strengthen the relationship among young creative forces and the tradition of the Italian manufctures.

Nevertheless, this is just a small step to the change: the desire is to create a format capable to go beyond the skepticism towards the design approach and the doubts and distrust towards the old preexisting structures.

In Italy there are plenty of excellence districts of production: some of them are overtaking the crisis, for others is more difficult. The district is a "pattern" recurring in all the Italian territory. However, all of them have a lot in common with the ceramic district analysed. The improved solution proposed can be easily readapted and scaled for other materials manufaturings, other schools, other kinds of educational paths.

The platform and supporting tools, - as the website - are part of a model born to integrate more the technicians and the companies in the design discussion.

A possible development could be a cycle of workshops, that can become, for instance, Wood Now, Leather Now, Textile Now, Marble Now.

The scent is more digital and modern, but basically is something that the Masters of Italian Design did, starting from the Fifties:

talking with companies and exploring the potentials of new technologies, they acted pushed by the needs of a country to rebuild from the ground. They had the spontaneous initiative, they were great and they succeeded in their mission.

Here the challenge is to innovate in a world where there is everything we need. It seems impossible to face a challenge of this proportions, and a lot of young creatives are escaping in those situations very similar to the Italy of the late 1940s.

But also here, where the technological innovation is exploited at the minimum of its potential, there is a lot of work to do and trustful relationships to create. This project wants to be just a possible guidance, one of the thousands of possible bridges that can be created. It is not obvious at all that it will succeed. Actually the failure possibilities are dangerously high. But the consequences are expected and measured to be not that bad that we cannot save the good ideas inside the model, fix it and try again.

In the end, Ceramic Now is just a good opportunity for everyone, to learn something directly from the experience. It does not start from scratch, it has a precursor that is an invitation to do a little step further.

Every deep change, every revolution, anyways, was done little by little, trying to introduce gradually small changes, in order to be prepared once the new floods into our lives.

Bibliography & web references

Aknowledgements