

ITALIAN POLICIES FOR LABOR FLEXIBILIZATION: THE ROLE OF DIGITALIZATION AND THE CHANGES IN ITALIAN JOB MARKET

TALIANSKE POLITIKY V PROSPECH FLEXIBILIZÁCIE PRÁCE: ROLA DIGITALIZÁCIE A ZMENY NA TALIANSKOM TRHU PRÁCE

NOVERO Serena

Abstract

During the last decade, the Italian labor market met increasing difficulties and changes, partly due to the large use of new communication instruments and digital equipment in the work activities. They modified the job types, procedures, layouts, times and the relationships among the workers. These changes have required new labor regulations, allowing an easier management of the new job impermanence and flexibility. The paper takes the stock of the Italian labor market situation and it collects some suggestions to improve on it.

Abstrakt

Počas posledného desaťročia zažil taliansky trh práce rastúce ťažkosti a zmeny, čiastočne kvôli veľkej miere využívania nových komunikačných nástrojov a digitálnych zariadení pri pracovných činnostiach. Tieto modifikovali typy práce, postupy, rozvrhnutie práce, pracovný čas a vzťahy medzi pracovníkmi. Tieto zmeny si vyžiadali nové pracovné predpisy, umožňujúce manažment nových pracovných miest, ktoré sa vyznačujú flexibilitou a obmedzenou dobou trvania. Príspevok obsahuje príklady z praxe talianskeho trhu práce a zhrnuje niektoré návrhy na zlepšenie.

INTRODUCTION

The Italian labor market has met increasing difficulties in the last 7-10 years: in 2007 the unemployment rate decreased to 6%, but since this data it has risen up to the actual 12.5%, the highest unemployment rate among OCSE Countries (with the young people unemployment rate equal to 42.4% and a total percentage of inactive people, between 15-64 years, equal to 23.8%). The already existing problems connected to the low labor demand, to the negative economic conjuncture, to the general markets' depression and to the labor over-taxation have been partially increased by the new ICTs diffusion. The ICTs have radically changed demand and supply in Italian labor market: the higher interconnections (thanks to electronic links) between workers and employers, the easier workers-firms matching processes, the quicker information diffusion, the new job search methods, the new job opportunities, the higher wages (Atasoy, 2013) and the relative lack of hand-work manpower have modified the previous labor types, layouts, procedures, times and the relationships among the same subjects. The ICTs have allowed the rise of new labor positions (because of the necessity of workers for higher production and through the demand for the firm's products), the disappearance of the "old" ones and the variation of many labor contracts. These continuous changes have required more dynamic and innovative firms' structures, opened to the new

market needs and to the new hi-tech possibilities and able to catch directly the consumers' new preferences (considering the information flowing from smartphones, social networks and "apps").

Because of that changing processes, several points of the national labor regulation need to be renewed:

- the Italian labor law (which includes also the criteria for the retirement rules) should be adapted to the new labor positions,
- the regulation on foreign labor investments, which are appreciably increased thanks to the symbolic disappearance of the Countries' borders and to the greater amount of means of communication, needs some changes
- the Italian people need a lower labor-tax burden (now it is very high and there has been the risk of a web-tax, too),
- the Italian labor system needs new instruments (contracts) supporting, in a better way, the development of skilled resources.

What just said shows how the improvement of the whole Italian Innovation System can't be postponed anymore: the innovative dynamic of Italian firms/SMEs is low, because of the too elevated bureaucracy of the national law and of public administration bodies which originate serious delay in information and labor authorizations, limiting the innovative actions. Indeed, many of the just presented difficulties could be partially solved by an higher digitalization of Italian public administration and labor market and, concluding, it is possible to notice a double tie between digitalization and labor market: the first has changed the second, but the new shapes/layouts of the second needs an increased diffusion of digitalization to work correctly. Broadband technologies are a complement to skilled labor, but their expansion increases the relative demand for skilled labor (Atasoy, 2013).

Since 2012, different Italian governments have defined new succeeding labor policies, trying to solve the labor market timing disconnection in the double tie "digitalization/market evolution" and to reach a more stable situation. Specific attention has been paid on the simplification of the national labor market and on the increase of its flexibility: more specifically, it should allow an easier exchange among the work forms and among the productive structures and it should make easier the entry-exit mechanisms in different labor positions.

1 NEW ITALIAN LABOR POLICY

The effects of digitalization processes in all economies has been largely recognized: they change some structural layouts, some problems of the national outcomes, they encompass the creation of new revenues, their distribution, the origination of new job positions and the reachness of other growing targets (Atasoy, 2013).

Surely, digitalization is „only“ a tool, which can be specifically useful only if new business ideas exist and we can't ignore the existence of the opposite mechanism: the new technologies and the new means of communication allow the increase of labor productivity (Kochan, 2013) and it could imply a reduction of the available job positions, because of the system automatization (Jamet, Chalaux, Koen, 2013; OECD, 2011) or they can also negatively affect business mostly dependent on local market – Atasoy, 2013). The dominance of the „optimist“ or „pessimist“ interpretation depends by several factors, which can't be explained now, but indeed, without the system digitalization, it will be difficult an acceleration of the

Italian economy in the short time: because of this consciousness, the Italian Government has realized some important steps in digitalization direction in the last labor market reforms.

1.1 The Monti government Italian Labor Market reform

In Italy, the last large labour work reform was done in June 2012 by the Monti Government (November 2011 – April 2013) Labor Minister, Professor E. Fornero. It was extremely discussed by the Italian public opinion, because it figures as the result of the interaction of many different political strengths. It has been modified in some points by the next Italian Governments Labor Ministers (E.Giovannini and G.Poletti), but its most important targets were preserved. One of the main purpose of Fornero labor reform is the increase of the job market flexibility, that means easier “entry-exit” solutions among different labor positions, more dynamic and inclusive labor market mechanisms and a concrete contraposition to unemployment and low-quality production problems. Observing the workers opinion on flexibility, they think it is a good opportunity to enlarge their work competences (38% of candidates¹), a challenge to improve their capacities (15.9% of candidates) and a mean to have more training courses during the period of employment (12.4%).

The Fornero labor market reform sustains the centrality of open-ended contracts (in fact, the 2014 Italian Stability Law previews the reduction of some labor taxations² for the firms which transform their fixed-term contracts in open-ended contracts). The reform introduces some new contracts to entry in the labor market, too; it would give new work opportunities to women and middle-age workers; it would introduce a better use of political instruments helping unemployment people; it would increase the employers/workers cooperation (in the workers’ training); it would reduce the labor precariousness and it would define a more inclusive work system, to strengthen the industrial Italian competitiveness, as a whole. Unfortunately, not all the instruments proposed by the Fornero reform have reached these targets and the final result appears mostly oriented to secure the already existing precarious labor positions. Looking at flexibility, the general impression of the Fornero reform is good, but the workers and the firms have seen it critically: the 34.48%³ of firms think the new regulation has limited the personnel management, although the 27.59% sustain the Fornero reform has stimulated the under-30 employment. More exactly, it has changed/developed the following policy instruments:

- *Institution of a dole (named ASPI)*: it was previewed the use of a specific amount of public money (1.8 billion of euro) for the institution of more copious money supports for un-employments people. This compensation goes on 12 or 18 months (it depends by the workers’ age) and it results also a support for new labors, because it can be cashed monthly or in a single solution to finance the creation of new activities. This social dole exists, in a “mini” form, for precarious workers too and it can be considered a right mean increasing the workers flexibility.
- *Apprenticeship contracts*: they are new instruments to start work collaborations (they are “staff leasing” contracts). They must go on 6 months, at least, they can be used in all the productive sectors and, at their end, the firms are obliged to assume the 50% of apprentices, at least. A limit exists only for the SMEs: their apprenticeship contracts can’t be more than 30% of their total contracts.

This new labor market instrument increases the worker flexibility, because it gives them a new way to be engaged by the firms, but, on the contrary, it lower the firms’ flexibility, forcing them to recruit the worker.

¹ Osservatorio InfoJobs.it

² ASPI and IRAP

³ Osservatorio InfoJobs: www.infojobs.it

- *Work temporary contracts*: they are occasionally made and they can't be overall paid more than 5000€/2000€ (it depends by the commissioner sector of activity) in a calendar year. These contracts, which must be paid with specific "Vouchers", increase the workers possibility to collaborate with different firms (in seasonal works, for example), but they give them the limit of the total value. This limit should avoid the workers' overexploitation (if a firm need a worker, it should engage her/him), but it has concretely limited the workers' chance (often, the Italian firms prefer changing collaborators, than definitely engage them, because of the labor Italian over-taxation). The impact of this instrument on labor market flexibility is negative.
- *Fixed Term contract*: they must have a max lenght of 36 months (after which the fixed term contract must be transformed in an open-ended contract), they can be renewed for the same worker only after a pause of the collaboration of 90 days (previously it was of 120 days). In these types of contracts it is not necessary define the reasons of work interruption. They have apparently increased the market flexibility, but the result is the opposite, because the Italian firms are not available to engage new workers, because of the labor over-taxation again.
- *Longer times to contest the not agreed interruption of a fixed term contract*, but shorter time for the appeal and faster work processes procedures: this has increased labor market flexibility.
- *New regulations for "VAT Number" contracts*, which avoid the workers' over-sweating: in fact, in some cases, the firms need an enduring worker, but they start "double-faced VAT Number contracts" to avoid higher payments of labour taxes. This new regulation should secure the workers, but, at the end, it has reduced their labour possibilities and the labour market flexibility.
- *A new contract named Co.Co.Pro* has been constructed to realize specific industrial projects, which has to be exactly defined by the employer before starting the work. It is remunerated by a yearly fixed amount (equal to the evarage of the collective agreements) and it has increase the labour market flexibility.
- *The Italian article on "dismissals" (Art.18)*: it was changed and it increases the possibilities of dismiss by the firms (there is more exit flexibility). Anyway, it previews the possibility of workers' reintegration (it depends by the magistrate's opinion) and it obliges the parties (employer and dismissed worker) to reach a reconciliation, into 20 days, if the dismissal is justified by economic reasons. This change in regulation has surely increased the firms' flexibility, but it has invited several criticisms by several labor unions, because of the lower work certitude. Anyway, the new Art.18 differs several types of dismissal determinants (justified occasion of dismissal, right cause, etc..) and some possibilities of work restore: it could be considered an instrument increasing the Italian labor market flexibility.
- *Changes in dismissal regulation*: the voluntary dismissal can be verified by a Government body until 3 years after the same dismissal, to avoid the compulsorily imposition of the phenomenon. This intervention has surely lowered the labor market flexibility, but it has properly correct an italian firms bad habit of unfair or constructive dismissals.
- *Lower legal compensation for illegittimated dismissal*: now it is equal to a max of 24 monthly salary, before it was equal to a max of 27 monthly salary. This reduction has increased the firms' flexibility, but it has reduced the workers' protection.
- *Reduction of the obliged interruption between sequents stagional contracts*: it increases the workers and employers' flexibility, allowing an easier management of stagional contracts.

- *Free health tickets* for unemployments and their families. This political instruments increase the labor flexibility because it support a more chancy workers' behaviour, reducing the negative effects of unemployment period.
- *New ways to start in advance the retired period*: this measure increases the opportunities of youngers workers to entry in the labour market and increased the labor market flexibility.

It is evident that not all the just indicated policy instruments are oriented towards the increase of work flexibilization and have ahead by the „economy digitalization“: the general impression is a lot of work still need to be done, but the reform can be considered a first important step towards Italian labor market evolution.

Anyway, there are still problems for the substitution between younger and older workers, the female labor, the low talents' appreciation by the firms, the firms' internalization and their ability to adapt in a fast way to the new labor contexts. Unfortunately, the results of the Fornero labor reform weren't completely satisfactory, but rather the opposite. They showed an increase of unemployment rate, a stable percentage of firms' engagements, of apprenticeship contracts and of the number of innovative start-up (although their financial supports), an increase of the temporary or fixed term contracts and of the firms' failures. The only good news is a reduction of dismissals, even if the new article 18.

1.2 The Digitalia decree

The Digitalia decree has been approved in the october 2012 and it represents the first realization of the Digital Agenda (march 2012) targets. It supports the Italian firms digitalization and it has previewed high investments direct to create new job positions (specifically for young people) and to increase the italian competitiveness and labor productivity.

1.3 The Letta government Italian Labour Market reform

The Letta Government (April 2013 - February 2014) Labor Minister, E.Giovannini, has fostered some changes in the Fornero reform. He has simplified the apprenticeship contracts, he has tried to unify the labor market rules, to reduce the labor taxation and to increase the female roles in the labor market: all these measures have contributed to increase the labor market flexibility. They have been realized through the use of solidarity funds, which are paid by the firms (in different percentages, depending on the firm's dimension) and which integrate the wage of the workers which have had a reduction of the labor hours: these funds for unemployment people are policy instruments increasing the work flexibility. Lastly, the Giovannini's modifications to the Fornero labor reform have included some changes in the labor exit regulation, too. They have given to the workers a concrete chance to retire in advance: this has meant higher flexibility and more job possibilities for younger workers.

On the other side, this reform doesn't considered, explicitly, the digitalization advantages and opportunities.

1.4 The Renzi government Italian Labour Market reform

The last reform of Italian labor market has been presented by the Renzi Government (February 2014 - still active) Labor Minister, G. Poletti. The reform, named *Jobs Act*, has just been constructed (it is very young) and it is going to be adopted (probably with some modifications). It is separated in two decrees: the first is going to become effective in a

shortly, the second is still to be discussed. The points underlined in the first decree regard new procedures for labor fixed-term contracts, which increase their flexibility (flexibility in entry):

The innovations are:

- The extension of the limit for fixed term contracts from 1 to 3 years,
- The complete elimination of the obligatory stop-period between two fixed-term contracts,
- The limitation of the fixed-term contracts which a firms can have (they must be less than the 20% of the total contracts).
- The elimination of the constrian of assumption of 30% of the apprentices in the firm.

The first comments underline as the reform novelties generally absolve the employer from beaurcratic obligations and they represent a strong impulse toward the labor market liberalization. However, also in this case the government has recognized that some steps, as the public expense/taxation reduction and the public financing of professional training are the most imperative targets.

The second group of job reforms, which will be analyzed by the government in the next month, would imply:

- The reduction of the job fiscal taxation for the lower wages (under 1500€/month),
- The reduction (of 10%) of firms' IRAP (a regional tax),
- The increase of the financial incomes' taxation (since 20% to 26%), which should finance part of the previous reductions,
- The reduction of the bills for the SMEs' energy services,
- The creation of a new dole (named NASPI), which will exists for each type of unemployment workers,
- The creation of a National Employment Agency (today all the regional seats are no well connected),
- New industrial policies for different sectors, among which the ICT.

About this last point, the Jobs Act previews a large use of ICT, Italian Digital Agenda and broadband networks to create new jobs and increase the general labor market flexibility. In this framework, the confirmation of the obligation of billing and payments in an elettronic way is one of its most important new steps targeted to „slim“ the payment procedures, to increase their rapidity and flexibility and to make more trasparent all the mechanisms. The second step regards larger investiments in Digital Agenda and broadband network: it has been recognized how they are useful to simplify the labor system, to actract investments (foreign investments too) and to create new job positions. The final target is the application of ICT in sectors in which italian excellences already exist (green economy, made in Italy, design, turism, food, agriculture, constructions and art works), to change Italian culture and to help its economy.

2 THE ROLE OF DIGITALIZATION IN ITALIAN LABOUR POLICY

2.1 The broadband diffusion in Italy

Italy, if compared with other European Countries, is in late in broadband and ultra-broadband diffusion⁴ (the 4% of national territory is still without the broadband connections and the ultra-broadband is available only for specific phone contracts and in the 40% of Italian cities). Italy is the last, in Europe, for the internet quickness and similarly, the realization of the

⁴ Osservatorio Ultra Broadband, march 2014 (<http://www.osservatoriobandalarga.it/index.php>)

Italian Digital Agenda is slow, because of the lack of proper human resources, financial funds and bureaucratic problems. Indeed, the Digital Agenda remains a concrete occasion for an innovative transformation of the Country. It has been largely recognized the need of a strong public sustain for its realization. S.Venturi⁵ sustains broadband structure investments should involve several Italian public administrations, which should operate next to private investors, firms and, most of all, Italian citizens.

The coexistence of public and private investments is absolutely a priority to realize the first Government target about the fiber diffusion: the connection of the 50% of private houses with a 30 Mb/s in three years. This is the first step to realize the general European indications: the coverage of all the houses with 30 Mb/s access network in 2020 and of the 50% of the houses with the 100% Mb/s, through the use of the European Structural funds (The national Telecommunication Company - the Telecom Italia S.p.A - and other 2 private companies - Fastweb and Vodafone - have defined projects about it: the first would like to reach the 100% coverage, the second the 20% and the third the 29%. The only negative aspect is that the three networks are overlapped and they don't cover more than 50% of Italian houses).

In November 2013, the Italian Government has realized, with some foreign advisors, a plan (the „Rapporto Caio“) for the analysis of the situation of the Italian digital infrastructures, to take stock on necessary interventions. The conclusion is the lack of „100Mb/s in 2020“ projects: a realistic projection for the 2020 previews the 30Mb/s coverage for the 70% of the Italian houses and it isn't in line with the European Digital Agenda targets.

In the „Rapporto Caio“ is indicated the necessity to monitor the different operators' projects and investments and to pay attention to eventually essential corrective actions: it is going to be defined a national investments' plan, which previews more coordination among the regions and between public and private subjects and which underlines the exigence of strong Italian Government interventions. They will foster operation similar to the last convention (2013) between Telecom Italia (the Italian national Telecommunication Society), Fastweb (the private company which has the largest optical fiber network in Italy) and some Italian Provinces, about the excavation of new thinner entrenchments for the fiber broadband network (NGAN: New Generation Access Network) and about the cables position in the existing public street light structures (these last solution will have a lower environmental impact and lower costs).

2.2 The role of digitalization in new national labour policies

It has been completely recognized the large role of digitalization and ICT diffusion in the labor markets. An higher capacity to work with digital resources increases the firms' capacities on research and innovation. It creates more forward chances of economic growth (although some author underline it largely depends by the overall ecosystem in which the firms are embedded – Kochan, 2013; Kanter 2012; Pisano and Shih 2012). Dott. Parisi⁶ has strongly asserted the larger possibilities of development deriving by an higher use and diffusion of ICT and digital systems in the Italian firms and the need of a deeper digital alphabetization of them, on one hand, of the rising of the digital services demand, on the other hand (Atasoy, 2013). He sustains the existence of the already expressed “double-tie” between labor market and digitalization, he says the new technologies can be a valid solution to increase the labor market flexibility, but he underlines the digitalization economic advantages risk to be lost if the flexibility in labor market entry is not increased. Because of that, he

⁵ Dott.Stefano Venturi is the managing director of HP Italia (www.hp.com)

⁶ Dott. Stefano Parisi is the Confindustria Digitale President

proposed to change the Fornero reform completely, to increase the digitalization of the Italian public administration (to give the ICT firms faster channels of communication) and to increase the flexibility in the assumptions of younger workers (specifically, digital talents and hackers). He has also underlined the large money saving due to the use of digital instruments (the videoconference solution, for example, is an efficient way to save money).

Deepening the most evident positive impacts of digitalization on labor market, it is possible to notice the acceleration of the instruction system, of high-skilled task (broadband results complementary to labor market skills – Atasoy, 2013), of the training processes, of the start-up firms experiences and of the firms' recruitment incentives. Successively, the positive impact of market digital innovation could express itself through the availability of new digital services for firms and private people (as *e-gov* and *e-health* services), the increase of the firms' business possibilities, of public interventions' transparency, of bureaucracy simplification and through the sustain to the born of new firms. On the Public Administration side, the digitalization processes seems to be the first driver to increase the firms' opportunity of business and then the planning of the investments.

In this framework, the last "Destinazione Italia" decree (February 2014) has concretely helped the development of ICT and telecommunication sectors in Italy and the realization of the Italian Digital Agenda. Assoprovider⁷ and Catricalà⁸ have underlined as finally this decree allows the Italian small and micro firms competing on electronic networks and internet services, because it eliminates the too high firms' payments to the public administration. Nowadays, at last, all the Italian innovative firms (of whatever dimension) can accede to telecommunication market, they can make new freer investments in mini-entrenchments' excavation, in fiber cables laying and they can manage the demand/supply of broadband services (most of all coming from Digital Televisions, Communication and book industry sectors). It appears the first step toward the digitalization of the Italian economy and of the Public Administration bodies. The attended result is the acceleration of the New Generation Network development and then of the labor market innovation (it should be allowed the rise of new jobs, connected with an higher diffusion of electronic instruments). The Destinazione Italia decree previews the sustain of innovative start-up, the creation of vouchers (with a value of 10.000 €) for the SMEs which acquire software or electronic equipment, the development of e-commerce solutions (the e-commerce can move demand of goods beyond local demand – Atasoy, 2013) and of broadband connectivity (the voucher can be used to finance a qualified training of the SMEs employments, too). Further, the decree previews tax credits (of 65%, till to a max value of 20.000€) for the SMEs which operate on fixed or mobile broadband networks, guaranteeing good connections, and for the firms which retail e-books.

The last cabinet presidents (M.Renzi) is paying specific attention on the Italian and European "Digital Agenda" programs too. One of his targets is to make easier the access of foreign supplier firms, to the commercial requests of the national firms, in a more clear and trusty economic climate. It could be made, for example, reducing the bureaucratic Public Administration requirements for digital operations (it could be an important first step, also because the Italian State has just given a bad signal to the markets: it gave back 40 billion, on 58, assigned by EU to spread and increase the digital habits in the public administration and Italian society). *After these considerations, we can conclude as in the recent labor market policies there are no aspect directly inherent to the job digitalization. They are present in the policies oriented to sustain the firms and SMEs' digital development, instead. Surely, some positive effects can descend indirectly from these policies to the jobs: they will not be enough, alone, but they will be an important first step, triggering.*

⁷ Association of Independent Providers - www.assoprovider.net

⁸ Minister of Economic Development

3 THE DIGITALIZATION IMPACT ON JOB: CHANGES IN WORK FORMS, TIMES AND LAYOUT

The Italian Digital Agenda (partial) implementation and the firms' digitalization have deeply changed the national job structures. Often, it seems the new technologies are going to efface the human contribution to many works, but several experts say it will be the opposite: the human competencies will be always needed and, more specifically, expert workers with transversal knowledge. In fact, the new technologies have allowed the rising of new work positions (and others are expected) and the labor digitalization (with the increased use of social networks and specialized communication instruments⁹) can represent a concrete occasion of job development. The new jobs deriving by the job digitalization phenomenon can be divided in two groups: the already existing and the future ones.

3.1 Existing new works

In this first category it is possible to find (Rapporto Confindustria, 2013; Ideeuropee, 2014):

- *New professionals of the network / Social networks developer*: today, the network has acquired a value also within the work. It creates stronger communication links and it increases the workers connection. New web-sites allow an easy download of data, others collect funds for private or public social initiatives, the social networks increase the human contacts with message services. Because of these functions, assigned employments, managing the firms' relationships, searching open data and developing crowdfunding web site, are required.
- *Technicians working on digital engines quality and security*: several private information are recorded at electronic level, as the identity card data, the digital address and the PEC address. They need to be protected.
- *New employments managing on-line shops* (they displayed a growth of 18% in 2012 in Italy, with a billing of 9.5 billions of euro) and the *firms' e-commerce activities*. They will have to update the online catalogues and the graphic layout of the online shops; they will have to manage eventual investments for the firm on-line image and the web site legal allowances.
- *New employments realizing services which require the use of electronic engines*: it is possible to find new waitresses, which take the orders and manage the service through on line engines; employees of the public sanitary system which make digital prescriptions and manage sanitary individual books and folders; new digital TV managers and dubbers; new employees assigned to the digitalization of individual documents (digital domicile, anagraphic data, payments of public administration and other several documents),
- *New specialists in digital e-books*: they work in their construction and management, as web-editors, web-designers, web copywriters and bloggers.
- *Health doctors which have digital competencies and new technicians which have medical informations*: the construction and management of health electronic equipments have required new transversal professionals,
- *Specialists in the Cloud Computing*, for data management and securization,
- *New employments of the advertising market*: today there is a mix between TV and Internet and all the workers operating in the ad.sectors must update their knowledge and be able to apply the marketing operations in the new digital advertisements too.
- *Technicians which work at the excavations/fiber cables laying and technicians working in all the new public digital services* (an example: the technicians of street lights with

⁹ Facebook, Twitter, Youtube, Smartphones, Hi-Phones, Tablet

sensors which detect if there is somebody in the street and regulate consequently the light),

- *New employments of the transport companies (train and airlines):* they should be able to work with online booking.
- All the subjects which operate in „*TeleWork*“ at home: they are professionals who can choose when, where and how working (<http://www.telelavoro-italia.com>).

3.2 Future new works

Next to the already existing new occupations, other future jobs are previewed. They are:

- *Broadband architect:* an advisor for network innovations. He will manage the new interactive contents, which are broadcasted by the network in the home TV.
- *Memory augmentation surgeon:* a doctor which will help old people to preserve their memory.
- *Body part makers:* he will construct new part of human body through biotechnologies,
- *Nano-doctor:* he will make medical micro-chips, with nanotechnologies, for health monitoring.
- *Bioinformationist:* he will use genetical information to develop the medications,
- *Geomicrobiologist:* he will study micro-organisms to find new medications or fight pollution,
- *Virtual set designer:* he construct TV and movies' virtual sets,
- *Concierge:* he works in hotel, he is trained to manage computer brerakdown,
- *Broadband architect:* he will be able to manage the interactive internet contents in the home TV.
- *Expert of 3D printer* (which construct plastic object with laser)
- *Cloud controller:* he verifies the sun radiations, through the clouds
- *Technological recycler:* he will manage the recycle the obsolete technological engines,
- *Citizen journalist:* he reports, analyzes and disseminates information without national limits.
- *New art restorer, artisan and chef,* which use new technologies.
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3.3 New work organizations and layouts

Firstly, the digitalization's impact on the labor market regards more time flexibility and freedom. Secondly, the new technologies often require experts with transversal knowledge: they should share their work with specialists of each involved topic and they should develop interactive qualities (usually they forgather in social networks and exchange information through digital ways). Third, the larger interaction has enhanced inter-firm collaborations: more international innovative projects are constructed and the members' interactions are managed in web-meeting group and video-conferences, for example. The result is a more flexible and collaborative networked world, where new models, more informal and decentralized exist, the information about jobs flow more quickly, to a wider audience (Atasoy, 2013). The "power" sharing is more accepted now (although some authors underline higher occupational concentration deriving by NGAN – Jamet, Chalaux, Koen, 2013; OECD, 2012).

3.4 Digitalization impact on work time

The general impact is an accelerated life. The job web sites make the work advertisements and announcements more visible (although the need, in Italy, of a reform of the national and regional employment agencies). The on-line services of public and private institutions have allowed an acceleration for bureaucratic practices (on-line bookings and payments, switch

on/off of documents, control and maintenance of data quality and sharing, paper saving and costs reduction). Surely, sometimes digital systems lack integration capabilities. This creates information clutter and content sprawl. Sometimes, employees have information spread across multiple platforms and they are not able to manage them in an easy way (because they don't perfectly know the available tools or because the system is not running rightly). Often there is the risk to lose data, because of digital breakdowns.

Anyway, general labor digitalization effects are evident: in some cases, we don't have to choose between career and family or between workplace and home. Through labor digitalization, no barriers will constrain us, our time and work environment. It is possible to be connected with colleagues through smartphones, free global videoconferences and cloud-based document sharing.

The result is higher flexibility and effectiveness: we can save time. Businesses men and professionals around the world are allowed to find each other in online workplaces and to work together via-internet (it is probable, the final productions will be more useful, because more comfortable environments foster collaboration and creativity). Today businesses can be on demand, they can answer to fluctuating needs and they create new companies growing quickly.

References

1. ATASOY H., 2013, “*The Effects of Broadband Internet Expansion on Labor Market Outcomes*”, *ILRReview*, 66(2), April 2013, Cornell University [Print 0019 7939/Online 2162-2710].
2. *European Commission*, “*Agenda Digitale Europea, Comunicazione della Commissione al Parlamento Europeo, al Consiglio, al Comitato Economico e Sociale Europeo ed al Comitato delle Regioni*”, Bruxelles, 26.8.2010.
3. GERRITSEN, M. AND J. HØJ (2013), “*The Dutch Labor Market: Preparing for the Future*”, *OECD Economics Department Working Papers*, No. 1012, OECD Publishing. <http://dx.doi.org/10.1787/5k4dlff4wcwl-en>.
4. *Ideeuropee*, *Digital Action*, <http://www.digitalaction.it/2014/01/29/la-digitalizzazione-delleconomia-prospettive-future/>
5. ISTAT, *Annuario Statistico Italiano 2013*, Capitolo 9: il Lavoro (<http://www.istat.it/it/prodotti/banche-dati>).
6. Italian Minister of Labor and Social Policy, <http://www.lavoro.gov.it/Pages/default.aspx>.
7. JAMET, S., T. CHALAUX AND V. KOEN (2013), “*Labour Market and Social Policies to Foster More Inclusive Growth in Sweden*”, *OECD Economics Department Working Papers*, No. 1023, OECD Publishing, <http://dx.doi.org/10.1787/5k4c0vtwpttj-en>.
8. KANTER 2012, KANTER, ROSABETH MOSS. 2012. *Enriching the ecosystem*. *Harvard Business Review* (March), 140–48.
9. KOCHAN, T. A., 2013, *The American Jobs Crisis and Its Implication for the Future of Employment Policy: a Call for a New Jobs Compact*, *ILRReview*, 66(2), April 2013, Cornell University [Print 0019-7939/Online 2162-2710].
10. OECD, 2011, *Divided We Stand: Why Inequality Keeps Rising*, Paris.
11. OECD, 2012, *Gender Equality in Education, Employment and Entrepreneurship, Final Report to the MCM*, Paris.
12. PISANO, G. AND SHIH, W. 2012. *Does America really need manufacturing?* *Harvard Business Review* (March): 94–103.

13. Presidenza del Consiglio dei Ministri, Agenda Digitale Italiana, 21 gennary 2014 (<http://www.agid.gov.it/agenda-digitale/agenda-digitale-italiana>).
14. Rapporto Confindustria Digitale, 2013, *Conference: Going Local Italy*, <http://www.confindustriadigitale.it>.
15. Sole 24 Ore, 2014, "*Banda Larga, Letta: Italia in ritardo, accelerare. Lo scorporo della rete Telecom? È extrema ratio*", 30 gennaio 2014.
16. Sole 24 Ore, 2014, "Banda Larga, Caio: *Operatori ancora in ritardo, tocca allo Stato*", 30 gennaio 2014.
17. STANDING G., CUTTER B., SOLOW R., *The European Journal* (on-line journal: <http://www.theeuropean-magazine.com/guy-standing--2/7231-life-after-labor>).

Contacts

Serena NOVERO
Università Cattolica del Sacro Cuore
Largo Gemelli 1
20123, Milano (Italy)
Serena.Novero@unicatt.it