The People-Based Approach in Human Resource Management

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DIGITAL HR

A Critical Management Approach to the Digitilization of Organizations

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Digital HR

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Digital HR

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Foreword

I have welcomed with pleasure the invitation given by Pasquale Davide de Palma and Amelia Manuti to introduce their book, because before reading it I have perceived, since their first venue to the Office, their high commitment to these topics, developed with passion and creativity, in a non ideological and aprioristic vision, derived from concrete experience and discoveries in the field.

What are these experience and discoveries? They have found out and want to enhance the potentialies that each person has in terms of performance, growth and development, even thanks to the IT tools. They do not emphasize technology alone, rather they consider it an output of human creativity, oriented to welcome different types of human needs but substantially oriented to drive its achievements toward a catalysing *mens umana*.

The acknowledgement of the value of the person who works has its roots in the truth of the nature itself, therefore, according to me, the book is addressed to anybody.

Since the origins and in the course of history, in the Christian experience this truth has been developed and has become a *vision and mission* to protect human dignity. We find a trace of it in the Gospel (work as a feature of God "My Father always operates" Gv 5, 17), in

the history of the Church, where very authoritative charisms, starting from S. Benedetto, have been source for a civil society, and in various magisterial documents, especially in those from Pope Leone XIII to Pope Francesco.

Creation and revelation are the work of God when he becomes a mate for humanity and the relationship between man and God becomes work because of the intrinsic productivity of the new gaze in accomplishing the given or retrieved task. This relationship becomes a *paradigm of connection* with everything.

Accordingly, it is a feature own to man and to the intrinsic desire for unity, to realize connections between the particular and the universal, where IT should become complicit and tool of such connection.

Going further to the specific issues dealt with by the book I find them quite familiar. I believe the authors suceeed in tracing a route which could be run both for the management issues relevant to *Human Relations*, also to *Education* as connector of demands and positive practices, and for the exercise of critical thinking.

But the relevance of the approach adopted by the authors is their insistence on the significance of the person who works, perceived as a factor of change and, furthermore, on the totality of people working together, whose result is much more than the sum of each individuality, as affirmed by G.K. Chesterton in *L'uomo che fu giovedì (The man who was Thursday)*: "Two is not two times one, two is two thousand times one", and before and better Jesus with his teaching *where are two or three together in my name, I am among them* (Mt. 18, 20). Therefore, among them there is the infinity, the eternal. And this is *team building*.

The book, in detail, takes the reader to the reflection about the relevance of *Digital HR, Big Data Analysis* and *Social Organization* processes for HR.

To introduce topics such as ethics and spirituality of these organizational processes could seem bizzare and unusual.

Ethics is produced by spirituality, a spirituality that is truth within concrete reality. But the organizational process is a dynamic made up of people. These latter would inseminate the organization to the extent

that they are equipped with human intensity and are centred on the *vision* and *mission* they have espoused. They would contaminate the qualitative processes of the organizational body namely the working community, that with the nexus *Digital HR* becomes a universal community or if encompassed in an inner network will be endowed with immediacy and ease.

The authors underline the relevance of *People Based* for *People Management*. Why is everybody so important for the organization, independently from the role and from the single contribution? Everybody is made in God's image. Therefore he/she is a collaborator of the Creator. Anyway such question opens up to something big, mysterious and unmeasurable.

Each person who works could be considered as a surprising unexpected event: this is the case of Natale Capellaro, worksman at the Olivetti in the fifties, who projected the calculator *Divisumma 24* and further became technical manager at the Olivetti.

In such framework, it is certainly significant the creative contribution of ideas brought about by *digital processes*.

Furthermore, a crucial relevance should be attributed to one of the most emergent topic of the book: identity in general and professional identity in detail. *And Me, what am I?* says Giacomo Leopardi in his *Canto Notturno di un pastore errante dell'Asia (Nocturne Chant of a wandering sheppard from Asia)*. The relationship between work experience and personal identity is fundamental because work is the expression of personal identity that relates with the truth of the self and in turn engenders ethic and intrinsic motivation, a typology of motivation that finds its apex in Salm 115 *Non nobis Domine*, *non nobis, sed nomini tuo da gloriam.*

Identity the dynamics of our relational encounters. *Digital identity* allows to make more rapid and easier these dynamics, and so the *app generation.*

Specifically valuable the authors' proposal of a social platform based on *cognitive intelligence (PPP3.0),* useful to foster the transition from *Digital Trasformation* to *Social Trasformation* for a digital transformation of the HR world.

Cognitive technology could not escape from the *intus lègere* that is from the act of reading within the person up to the crucial and undeniable principle enounced by the One who said *that is, I make everything new* (Ap. 21, 5).

Salvatore Vecchio

Preface

This book is about the complex relationship between the meaning people attach to work experience as a fundamental component of their personal and social identity and the radical transformation that technologies are operating on the labour market.

Yet, within the last decades, technologies have continued to evolve, providing very sophisticated applications and justifying the use of eloquent labels to refer to them, such as "cognitive technologies", "bionic brains", "smart machines", "amplified intelligence". Technologies have been proved to potentially be a precious complement to human work, helping workers to be more productive and delivering higher-quality results. However, beyond these evident beneficial effects, the use of technologies is also challenging the labour market and the implications of such revolution are still to define yet. Technology will inevitably lead to the elimination of some jobs, at least of some of the most simple and routinized ones. It will also lead to the redefinition of many jobs and to the introduction of new kinds of professionalities. Consequently, workers with strong digital skills will have the opportunity to make further progresses and to lead smart machines, while those unequipped workers will probably give up to this revolution.

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And this (r)evolution has inevitable consequences also for the meaning attached to work and for the role it plays for the development of personal and social identity of workers who are striving to reorganize their existence in this renewed scenario.

Moving from these reflections, this book aims to connect the debate about the emergence of cognitive intelligence in the organizational context with the Human Resource Management (HRM) perspective. A people-based perspective has been adopted to investigate the changes that are investing the employment landscape and that will further change it in the coming years and consequently to examine if and to what extent Human Resource Management practices may play a role in such game. To this purpose, the book articulates into five chapters.

The first chapter "The People-based Approach to Human Resource Management" introduces this perspective by placing the reflection about the revolution brought about by Cognitive Technologies in the labour market into a wider theoretical framework. Drawing on some of the most authoritative contributions in the field of Management Sciences, this chapter argues for the need to rediscover a worker-oriented approach to People Management, namely a perspective that might strategically enhance the value of human capital for organizational competitive advantage. Nevertheless, despite some highly pessimistic positions about the implications that a digital turn would engender for organizations in terms of depersonalization, substitution of human labour and downsizing operations, the chapter contends that cognitive technologies could be allies of a people-based Human Resource Management as long as they provide managers with tools and applications that could make their work easier in terms of data management and at the same time could help them in developing virtual space to motivate and to empower employees. These evidences are further supported by the voice of a small group of HR managers operating in the context of big multinational companies that gave their professional contribution about the positive effects experienced in adopting a people-based approach to People Management.

The second chapter "The Cognitive Technology Revolution: A New Identity for Workers" aims to debate about the cultural and sociological changes that parallel to the digital revolution have redesigned the contemporary social environment. The clash between generations of workers—baby boomers, gen X and millenials—in terms of value and

meaning attached to work, motivations and digital skills imposes a redefinition of most of the traditional theoretical and methodological assets of HRM. The chapter attempts at considering the challenges that managers and professionals will meet in the next future while relating with a very composite workforce.

Parallel to this evidence, the third chapter "The Cognitive Technology Revolution: A New Role of HR Practices?", aims at considering the consequent redefinition of the HR function with reference to a completely different labour market and to multifarious demands in terms of People Management. In this vein, some of the main cognitive tools and applications in use with respect to people management, assessment, recruiting and training are considered with a special attention to the advantages they could provide to organizations in terms of individual and collective performance.

Consequently, the fourth chapter "Social Networks as Strategically of HRM Practices in the Cognitive Technology Era" further explores the benefits associated with a critical use of social media in organizations. More specifically, the chapter connects the affordances granted by social networking tools to the need organizations are increasingly manifesting to empower collaboration. The paradigm of Social Media Enterprise or Enterprise 2.0 is debated with reference to opportunity that organizations that are turning digital might experience to develop and exploit social collaboration through cognitive technologies.

Finally, the last chapter "How to Develop Digital HRM Practices in the Cognitive Technology Era: Evidences from a Case Study" aims at showing concrete evidences about the assumptions that have guided the entire book. A case study accounting for an Italian social collaboration explorative project is described. The analysis of the data collected generally confirms that, if framed within a solid development project, cognitive technologies could be absolutely beneficial for HRM, until they provide a supplementary view of the main processes featuring the organizational life, supporting and integrating most traditional people management practices.

Bari, Italy   Amelia Manuti
Molfetta, Italy   Pasquale Davide de Palma

Acknowledgements

Here we go again, once more it is time for acknowledgements. And this is the part I like most.

As usual I cannot start but to be infinitely thankful for having Giuseppe and Matteo in my life. I am so lucky to have you both at my side, always holding my hand and looking with me in the same direction. Thank you for your patience and for the energy you give me every day. We are a great team!

A huge thank you goes to our Editor for having given us this third chance. Thank you for the enthusiasm showed while welcoming our proposal, for the encouragement and the precious suggestions given upon a very draft of the book and for all the work upon the final version.

Finally, I would like to thank my co-author, Davide, for pushing me to believe in my dreams. And this third adventure together is the evidence that sometimes even dreams can come true.

Amelia Manuti

We're in the third book! And it is surely the book that best represents the evolution of our thinking. Thank you very much to Liz Barlow for believing and for pushing our work. Thank you very much to Maria

Cesaria Giordano, for the love and patience that she dedicates to me. Thank you so much to my friends and colleagues for their patience and for the valuable advice and suggestions. Thank you so much to Amelia that she once again became involved in this new adventure.

Thank you so much to all the workers I've met for contributing to improve my life and my thoughts!

Long life to the management of human resources! Long life in the digital transformation!

<div align="right">Pasquale Davide de Palma</div>

Contents

Introduction

HR in the Digital Age

How can you improve driving the car with the Thoughtpower of your Brain? How is your mirroring neurons giving you new HR options? Is your Brain a Digital Device or something beyond? What new metrics will emerge to assist navigating High Performace Teams?

Human performance has always been of interest. Human Resource Management has a later date, very much related to the Industrial Era. Another special research area has been Human Capital, with among others Nobel Prize awarded research by among others Theodore Schulz 1979, resp. Gary Becker 1992. This book is addressing HR related to the emerging Digital Era.

From my perspective Human Capital is a part of the larger conceptual perspective Intellectual Capital, meaning derived insights of head value, or more simply Intangibles. It can be seen in my book Corporate Longitude, 2002. Human Capital is surrounded by the so called Structural Capital.

Structural Capital is there when the Human Capital go home or leave the enterprise. Structural Capital is the network, trade mark, the

software, ICT and the organizational systems. It is working 24 hours a day. These assets seldom show up in the Balance sheet, but should according to International Accounting Standard rule no 38. Human Capital is only there for a limited time. According to some research it is at best there for around 4 hours.

So we might be moving from the old paradigm of HR as resources to be exploited, to the Manpower paradigm. It has already been applied by Singapore, that shifted from Ministry of Labor to Ministry of Manpower, many years ago. And Singapore is now in the lead postion of Naitonal Intellectual Captial in the World together with USA and the Nordic countries.

From this emerge the insights that there is a multiplier effect of combining Human Capital with Structural Capital to an aspired productivity. The formula might be as simple as **HC × SC > 1**. The productivity is then emerging in a focus on the multiplier effect mainly by the structural capital.

This effect can be easily illustrated by among others the knowledge sharing system www-world wide web related to internet infrastructure. It was invented close to 30 years ago by Sir Tim Berners—Lee, then at CERN, Switzerland, as a system for cooperation among scientist and knowledge exchange in a network of hyper text doc. Such an outcome has been described by Dr. Douglas Engelbart, inventor of hypertext as well as the computer mouse, as Augmented Intelligence. Another illustration is mobile phone systems, soon in its 5th generation. Earlier you were forced to be wired, and connected to copper cables. Now it is wireless and fiber optics, transmitting the digitalized signals at a high speed of light globally.

HR can now develop into a digital ecosystem to nourish the Human Potential. If it initially was to focus on Human Resource strategy, as muscle power, it is now becoming an ecosystem to leverage the Human Brain Power Potential. It will challenge the surrounding infrastructure, such as a work day system of 7 hours, going to a fixed office place or retirement system based on leaving workspace at around 60?

The emerging era is now also called the **MIND Era**, with focus on the research from among others neuro science. It is accelerating with fascinating insights. At what time of the day is your thinking at best? At

what age is your creativity flourishing? At what space are your inspired thinking flourishing. What so called functional food will have a sustainable impact on your mind?

Thoughtware will be the products of our next generation. The signals are there to tell you that there is a transformation ongoing from Taxi to Uber, from hotell to Airbnb, from currency to bitcoin. The glue or common nominator of such cases are Thoughtware and wetware systems, as labelled once by prof. Paul Romer.

In this shift we will also see a shift of Regulatory innovations. Away from the paradigm of Office hours to Brain peak hours, from traditional schooling to Artifical support system, from Retirement to Silver Potentials, from Labour Regulations to Manpower system, etc.

To observe and understand such shifts in Society and emerging new organizational systems surround the HR, we started Skandia Future Center already in 1996. Now it has been followed by a number of similar set ups in Europe and more than 50 in Japan only. The Future Center offer a Mind space for refining the signals from the surrounding eco system, and transformation of a workplace to a an intelligence hub for Thoughtware. The organizational challenge for HR might be the combinatoric innovation of a Prefrontal cortex systems with the technology options, such as block chains. Amazon is already prototyping some of this in new retail systems. For navigating such transformation and the economics of it, we need to upgrade to an extended value creating perspective, such as Triple Bottomline, with the Intangibles and Intellectual Capital components as key roots for the welfare fruits for next generations.

Happy Future!
Leif Edvinsson

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The People-Based Approach in Human Resource Management

Abstract Within the last decades, the idea that the competitive advantage of organizations can be driven by the accumulation of high quality human resources has affirmed in the scientific literature. The focus on human capital as a source of competitive advantage has led organizations to compete in the talent war and to adopt a strategic management of people mainly defined resource-based. This perspective has emphasized the role played bu human resources as an intagible though valuable, rare, and non-substitutable asset of the organization. Human resources are precious because they are scarce, specialized, and hold tacit knowledge. The chapter goes into detail of this perspective in light with the results coming from a corpus of interviews with some of the most representative HR managers in Italy (Elica, Insiel and NH—Hotel). These case studies will show the crucial role played by people in organizations.

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1   Introduction

Almost 20 years ago, Jeffrey Pfeffer, Professor of Organizational Behavior at the University of Stanford, published a book titled "*The Human Equation. Building Profits by putting People first*". This book, following another manuscript published four years earlier (*Competitive Advantage Through People*), marked a milestone in debate surrounding management approaches.

In view of the increasing evidence portraying the negative impact of scientific and rationalistic organizational models, Pfeffer advocated a more participative approach to management, suggesting that a company could gain sustainable competitive advantage by treating employees as its most valuable resource. Pfeffer's most important contribution was his critical analysis of the most common misconceptions about organizational economical success, includingl the belief that cost-cutting is the only way to increase profitability. Adopting an evidence-based approach, Pfeffer showed the risk of relying on downsizing as a means of increasing profits by arguing that employees could become distrustful and uncommitted to a company that considers them a disposable commodity.

By reviewing studies from different kinds of industries (e.g. automobile, steel, apparel manufacturing, semiconductor, oil refining, and service firms) Pfeffer identified several key dimensions to increase profitability through people. Among them areemployment security and information sharing. According to common managerial rhetoric, employees should be encouraged to develop their skills enabling them to be employable. Therefore, HR practices often support the idea that employment security is a thing of the past, represented by the growing number of short-term and on-call employees. Yet, this assumption could actually be based on a greater need to avoid making such guarantees to employees due to the possibiblity that organizations may decide to downsize. However, even more recent empirical evidence indicated that the decision to downsize often creates negative consequences for people, and of course for organizations that sometimes cost to the latter more in terms of performance and quality (Quinlan and Bohle 2009).

In view of this, employment security has become a crucial variable in the development of the person-organization relationship, and thus greatly influences performance management (Coyle-Shapiro and Kessler 2000). Pfeffer made a comparison between the employer/employee relationship and a personal relationship. It would seem paradoxical to ask for someone's committment and loyalty at a point when you no longer value them. This would clearly not elicit a positive response in the relationship, nor would it elicit a positive response within a work environment. Pfeffer asserted that a workforce which is commited to its company will be more productive and act in harmony with the organization.

A second strategic dimension debated by Pfeffer is information sharing. He indicated the importance of sharing financial and performance information with the personnel. Actually, one of the problems with organizations is that management often fail to align business practices with stated goals. Management should determine what types of employee management processes will work to achieve corporate goals. If a company wants to achieve its goals, management needs to have the support of the employees. This goal can be achieved through management practices that support participation and people enhancement. Likewise, this dimension finds support even in most recent studies confirming the strategic relevance played by the alignment between employees' values and organziational goals (Paarlberg and Perry 2007).

A generation has passed and it is quite amazing to note the absolute modernity of such assumptions, that are even more important in the turbulent and fragmented economical and cultural scenario of the present labour market.

Accordingly, the radical transformation of employment and the discontinuity of career paths have led organizations to reconsider their traditional organziational models and have pushed individuals to consequently restructure their employment relationship. Issues such as career attitudes, psychological contracts and organizational behavior have been widely investigated within the last decades showing that traditional theory and HR practices are no more sufficient to explain what is going on at present (Gerber et al. 2012).

In view of this, the aim of the present chapter is to introduce a people-based perspective to human resource management in light with the results coming from a corpus of interviews with some of the most representative HR managers in Italy (Elica, Insiel and NH—Hotel). These case studies will show the crucial role played by people in organizations.

2   Turning Organizations Inside Out: The Theoretical Origins of a People-Based Approach

Within the last decades, the idea that the competitive advantage of organizations can be driven by the accumulation of high quality human resources has affirmed in the scientific literature (Noe et al. 2006). The focus on human capital as a source of competitive advantage has led organizations to compete in the talent war and to adopt a strategic management of people mainly defined resource or people-based.

This perspective has emphasized the role played by human resources as an intagible though valuable and potentially rare, and non-substitutable asset of the organization. Human resources are precious because they are scarce, specialized, and hold tacit knowledge (Fernandez et al. 2000; Lepak and Snell 2002; Lepak et al. 2003; Ray et al. 2004; Wright et al. 2003).

As showed earlier, the value of people inside organizations is not a recent discovery. Its orgins can be found in Elton Mayo's investigations at the Hawthorne Plant of the Western Electric Company in 1949 where he initiated the so-called Human Relations School.

Actually, Mayo gave a great contribution to the debate about the relationship between people and working context, ouvertly conflicting with the dominant scientific view of organizations. He was the first to underline that organizations cannot be seen simply as phisical contexts where people go to work, they cannot be considered as mere containers of people accomplishing a task. Individuals invest most of their cognitive and affective resources in what they do at work and of course parallel to this they engage in formal and informal relationships that shape their

professional experience. Far from being a mere technical component (as Taylor defined them), people at work are resources, subjectivities, persons.

This perspective proposed a renewed vision of the working organization and greatly emphasised the subjective dimension implied in the working experience.

Some years later, this awareness has been further amplified by the important contribution of social constructionism, namely a theory of knowledge developed in social sciences that basically state that human beings rationalize their experience by creating models of the social world and share and reify these models through language (Berger and Luckman 1966).

Applied to the organizational research, this perspective flows into what is called 'relational constructivism' (Hosking 2004, 2011), a theoretical proposal that radically changes the way organizations are approached and investigated.

Moving from the authoritative work by Weick (1979), the organizational context is completely redefined as a dynamic system of organizing processes. Yet, the organization is a "fluid, continually changing, continually in need of re-accomplishment, and appears to be an entity only when fluidity is 'frozen' at some moment in time" (1979: 90).

In view of this, people and organizations are interrelated: it is impossibile to fully describe and understand organizations without making reference to how the people who are in those organisations implicitly and explicitly relate to them. And of course, viceversa. It is like the Matrioska, the Russian wood puppets containing smaller puppets inside. If we want to investigate organizations we need to open the bigger puppet and take out all the smaller ones.

Therefore, relational constructivism rejects the entative view of the organisation, that sees people and organizations as separate and independent entities, in favour of a relational view, we could say a people-based view, considering organizations as networks of relationships where people always play a central role (Hosking and Morley 1991; Hosking 2004).

Accordingly, the crucial importance attributed to people inside organizations is further emphasised by the role that this perspective

acknowledges to the process of subjective interpretation, namely the sensemaking process that allows people to attach meaning to the organizational culture and consequently of their role inside of it.

In sum, an entative view allows researchers to describe organizations by focusing on their hard features (e.g. the workforce, the distribution of power, the leadership style, the profits, the stakeholders, the brand image, etc.). Nevertheless, the relational view allows to go deeper and to catch how people inside the organization interpret these hard features, how do they value them and how do they behave consequently. In this view, it could be concluded that people and organizations are not separate actors, they are faces of the same coin as long as organizations *are* the people who crowd them.

3   Positive Effects of a People-Based Approach on Organizational Performance

In line with the theoretical speculations discussed earlier, most recently abundant empirical evidences have confirmed the positive impact of a people-based approach on organizational success and performance.

Actually, through work experience people make sense of their protean personal and professional identity, they gain meanings to intepret what they do and who they are. Far from being simply the physical context where people go to work every morning, organizations are cognitive representations in the mind of workers, intepretative repertoires of both the self and the social world that dynamically interact with one's experience of this relationship, making sense of it. In view of this, even the relationship between person and organization should be re-read: it could not by merely reduced to a material exchange (performance for money), rather it is tinged with more profound meanings, that imply the physical, cognitive, emotional investment people make. Actually, if positively managed, this is a 'win-win' relationship. People are generally led to find a relevant source of identity in organizations: if they feel involved and motivated, they consequently work more and better. On the other side, if organizations would take advantage from this evidence and would aim at higher performance and greater profits, then

they should support people in developing positive relationships with the context and they should try to create conditions that might foster this positive chain.

This is what Weick (1979) calls the *interdependence* between people and organization.

In view of this, within the last decades, several researches have shown empirical support to this evidence. Luthans and Youssef (2007), for instance, argue that a positive organizational context could enhance the positive features and capacities of its human resources and consequently could produce positive behaviors (e.g. organizational citizenship and extra-role behavior). Accordingly, positive organizations are those that adopt effective selection and placement practices, capitalize on employees' talents, have clear and aligned goals and expectations, social support and recognition, opportunities for growth, development, and self-actualization. These organizational variables have been found to significantly contribute to employee engagement, customer satisfaction, and ultimately organizational profitability and growth (Harter et al. 2002, 2003).

In a similar vein, Salanova et al. (2012) postulate that healthy and resilient organizations (actually HERO organizations) are those that succeed in building positive relationships with their employees (healthy human resources), in managing efficiently the organizational resources and practices (healthy organizational resources), and thus in producing healthy organizational outcomes measured both as objective outcomes (e.g. financial performance, absenteeism, turnover rates, etc.) and subjective outcomes (e.g. employees' satisfaction, commitment, motivation, etc.).

These findings are also confirmed by the so-called "mirror of satisfaction" effect, that is the relation between job satisfaction of service employees and customer satisfaction, claiming that satisfied employees perform their work better and contribute to increasing levels of customer satisfaction (Schneider et al. 2005; Netemeyer et al. 2010; He et al. 2012).

Parallel to these speculations, Spreitzer and Porath (2012) contend that organizations have good reasons to care about employees. They show empirical support to the need for organizations to have a thriving

workforce. Actually, thriving workers are not just satisfied and productive employees but also workers engaged in creating the future—the company's and their own. According to this perspective, even if some workers are naturally vital, want to learn into their jobs, and inspire the people around them, some others need to be supported and could be influenced by the organization. Therefore, if organizations want to gain a competitive advantage, that as shown earlier mostly originates from the distinctive quality of the employees, they should better support human resources, give them a chance to learn, to grow and to make meaning of their professional experience. This focus on people lead organizations to *sustainable performances,* that are both beneficial for individuals and organizations (Spreitzer and Porath 2012).

Accordingly, thriving at work has been conceptualised as a positive psychological state characterized by a sense of energy and vitality, that is strictly connected with a sense of growth deriving from the desire to continually learning, improving knowledge and skills and getting better at work (Spreitzer et al. 2005; Porath et al. 2011; Spreitzer et al. 2012; Sonenshein et al. 2013).

Therefore, thriving could be certainly a personal feature. Some employees are naturally oriented to consider work, as a learning context (Spreitzer and Porath 2013). However, recent evidences confirm also that organization could play a crucial role in encouraging people to thrive (Spreitzer and Porath 2012).

A positive organizational climate, for instance, have been proved to be significantly related to job performance as well as to organizational behaviour (Gerbasi et al. 2015). Positive relationships at work ight impact on motivation (Quinn et al. 2012), engagement (Clifton 2011), satisfaction and well-being (Dutton 2003), sense of growth and development (Dutton 2003, 2005).

Pragmatically speaking, there is a lot that organizations can do in terms of human resource management practices to encourage people to thrive. Organizations might provide employees with decision-making discretion, they might encourage and support sharing information, they could contribute to minimize incivility, and they could give performance feedback (Spreitzer and Porath 2012). More simply, people

should be conducted to see that their contribution is important for the organization and that it fits with its mission and strategy.

This evidence is further supported by the positive relationship between perceived organizational support and employee's orientation toward the organization and work, employee performance, and well-being widely documented by some recent metanalysis studies (Rhoades and Eisenberger 2002; Riggle et al. 2009; Kurtessis et al. 2015). Findings coming from abundant research in the field show that perceived organizational support is related to some major antecedents such as perception of organizational fairness, human resource practices, and supervisor support, as well as to attitudinal consequences (e.g., affective organizational commitment, job satisfaction), and job performance. Therefore, the more employees feel that the organization values their contributions and cares about their well-being the more they feel attached to the organization, the more they share organizational goals and consequently the more they engage in fulfilling them and thus in performing efficiently. The present assumtions are further amplified by studies on the relationship between leadership style perceptions and performance measured as organizational citinzenship behaviour (Vigoda-Gadot 2007), and on the impact of organizational learning culture and some other crucial outcomes such as job satisfaction (Chang and Lee 2007) organizational commitment and intrinsic motivation (Joo and Lim 2009).

Therefore, these evidences lead again to highlight the strategic role of human resource management practices and the need to improve an *evidence-based HR management*, that is a people management practice inspired to the link between employees' behavior and organizational competitive advantage (Noe et al. 2006). Actually, findings coming from a rich literature show that it is through HR practices that the management could develop a positive relationship with employees, could foster motivation, could give meaning and direction to the organizational behaviour of workers. Moreover, it is through HR practices that the management could create, transform and develop knowledge as a crucial, precious, distinctive resource (Lindgren et al. 2003; Manuti et al. 2017), indispensable for the organizational survival especially in times of turbulent and rapid changes as the present ones (Andriessen 2004).

4   Exploring Challenges and Benefits a People-Based Approach in HRM: The Point of View of HR Managers

After this brief overview about the theoretical foundations of a people-based approach and its connections with organizational efficacy and individual empowerment, the chapter aims at exploring how these assumtions could become concrete in the actual management of the organization.

Therefore, an explorative investigation of the HR managers' point of view about a people-based approach was set up. Three individual interviews were conducted respectively with three HR managers operating in large multinational companies were conducted. The topics covered during the interviews were related to HR management policies and practices. Various kinds of companies were selected in order to investigate if and to what extent the different mission of the organization might have had impact on HR management practices.

The companies involved are Insiel, Elica and NH Hotel.

Insiel is one of the most important Italian Information Technology company. Insiel collaborates above all with the public administration, more specifically with healthcare and public welfare sectors, to improve and manage knowledge and innovative services.

Elica is the world's leading manufacturer of cooker hoods for household use. The company has eight plants worldwide in Italy, Poland, Mexico, Germany, India and China. 3700 employees produce 19 million pieces ranging from hoods to motors every year.

Finally, NH Hotel is a benchmark operator of city hotels in Europe and Latin America. It operates close to 400 hotels in 30 markets, including top city destinations such as Amsterdam, Barcelona, Berlin, Bogota, Brussels, Buenos Aires, Düsseldorf, Frankfurt, London, Madrid, Mexico City, Milan, Munich, New York, Rome and Vienna.

HR managers for all the three companies were interviewed about their concrete engagement in recruiting and retaining human resources, about their practices in managing rewards systems, job performance evalutation systems and diversity management systems.

Results coming from these interviews are particularly interesting as long as they allow to find a fil rouge among them even if coming from very different organizational contexts.

The first area of investigation is the meaning attached to their job, namely to manage people.

1. "It means to understand and to enhance people's skills and aspirations. This is not a burocratic activity. Therefore, first of all it is important to go behind the matriculation number, it is important to know the professional and human story of colleagues, thus becoming a point of reference" (HR Manager, Nh Hotel)
2. Aspirations might be useful for the organizational goals. Personal sensitivity, ability to understand the others and their motivational pulls, an extensive knowlegde of the business, of its critical points, credibility and authority in proposing win-win solutions for the company and for the employees are the required skills for an HR manager" (HR Manager, Insiel)
3. "The job of human resource management has greatly changed, it has become better. Today, HR managers are no more the ones of the past. To evolve we have been pushed to get closer to people, trying to demolish the wall that historically speaking divided HR functions and other functions in the company and then lastly people. Nowadays the challenges we are coping with are very different. We are engaged for instance in attracting talents, in developing team work abilities, in increasing self-efficacy and in improving communication. These are some of the challenges that in the future will become even more important." (HR Manager, Elica)

All HR managers agree that people are the core of their job. They contend that to perform their job efficiently, they need to train and to constantly engage their soft skills connected with the management of relationships.

The second question is related to the organizational policies in use in each of the contexts with special reference to talents' enhancement. The contributions given by the manager interviewed strictly connect with a

people-based approach. HR Management could not be based on the use of predefined theoretical models, of standard policies and tools. Rather it is a "situated" process that begins with the analysis of the context and of the people involved in order to create the conditions that could foster the development of skills and abilities. As in the words of the HR Manager at NH Hotel (ex. 4) every resource has a potential that could make the difference. Therefore, HR policies, as coherent expression of the organizational culture, need to constantly engage to reveal these potentialities and "exploit" them for organizational success.

4. "Employees' enhancement is not a definite process, it is part of the organizational culture, it is a daily engagement. To enhance means to acknowledge good performance, to celebrate them, to give them voice, to reward them and to allow employees to accomplish his/her differential contribution with respect to his/her potentialities." (HR Manager NH Hotel)

5. "Insiel is experiencing a phase of profound transformation of the organizational vision and mission. The cornerstones of this transformation are: Responsibility, Merit, Training and development, leadership, good climate and organizationa wellbeing. For each of these priorities we have defined a detailed programme, where first actions are referred to the launch of a new professional system, the definition of training plans for each role, the begininning of a revision process of the reward system and the definition of a new strategy for internal communication." (HR Manager Insiel)

6. "My role is to allow people to work efficiently and to enhance their talents. It is crucial to give our people the tools and the adequate HR support to express one' s self at his/her best and to create conditions for future growth and development. This the first challenge for HR's. and this is our Employer Value Proposition" (HR Manger, Elica)

The awareness about the strategic value of people more clearly emerges while talking about the skills required by the companies to reach organizational goals. All managers underline the importance of considering recruiting a strategic phase of the organizational life as long as it allows

to choose the resources that could best interpret the organizational culture. The person/organization fit is a crucial element and it is clearly exemplified by the metaphor of the DNA (ex. 9). Yet, the HR Manager in Elica underlines that the recruiting process allows the company to find people who have the same DNA of Elica. These people are recognized as part of the family even before being actual members of it.

7. "More than skills I would say motivation: the driver to learn what you still do not know and constantly you will not know considered the fast-changing context we are called to manage. A compatibility between candidate and company that warrants a reciprocal growth in the same direction. We look for a motivation to grow, to challenge one's self and to make the difference. To work in a multinational company featured by processes and procedures highly structured and in a very dynamic context" (HR Manager NH Hotel)
8. "It depends on the function you are recruiting. It is important to have the same determination and teamwork skills. Organizations ae even more complex and the interdependence between functions requires the ability to relate to each other in a productive manner and in the interest of the company" (HR Manager Insiel)
9. "Recruiting is our DNA. Our aim is to recruit workers that understand and support our values. Therefore, it is fundamental to choose the right people. Those people who have a DNA similar to our DNA. This allows us to build a context where teamwork and innovation lead to higher motivation and better performance" (HR Manager Elica)

In a similar vein, HR Managers are called to specify three features of the ideal candidate. The features are very similar and once more mirror unique and transversal skills that could actually contribute to make the difference in a very complex and competitive labour market.

10. "Features such as determination, curiosity, desire to grow togerther with the company. Therefore flexibility, problem solving and ability to think out of the schemes, geographical mobility and language skills" (HR Manager NH Hotel)

11. "Passion for technology and ability to cope with the complexity with determination and desire to collaborate with others" (HR Manager Insiel)

12. "International spirit, desire to open to new experience. Multiculturalism, that is contamination, flexibility, critical thinking. Innovation and intellectual curiosity, a transversal motor generating hunger for knowledge and desire to look at the world" (HR Manager, Elica)

Further, another very interesting point is the definition of 'talent'. Again, managers emphasize the interdependence between people and working context and the role of HR in supporting this relationship. Talent is not an ascribed objective feature. It is the result of the interaction between individual abilities and contextual affordances. Therefore, of course there should be drivers and goals but the organization should engage in creating condition to make talents fully express themselves.

13. "I will begin with a definition of talent not as "excellent performance" rather as "optimal performance within the last 2 years (the temporal dimension is really important) with a strong orientation to business and excellent organizational behavior. Moreover, talent is a clear potential of growth and the necessary individual ambition to grow up. To distinguish between performace and talent is fundamental. As for the drivers, I think there are no transversal drivers. Each company should derive them from one's own managerial and cultural model. Our drivers are Insight, Engagement e Determination." (HR Manager NH Hotel)

14. "Talent is in every person. Our effort is to understand the strenghts of each worker and try to enhance them. It is important to know how to use one's skills in a focused and organized manner. By this, excellent goals could be reached" (HR Manager Insiel)

15. "I think that talent doesn't exist. I try to explain better: in Elica talent is the ability to learn new skills together with the ability to rapidly read the context you are living in. The higher are these abilities, the higher you are a potential talent. The talent is the best worker for my company, in that context, in that role and at that

time. Maybe what my colleagues in other companies consider talent is not talent for us, for my company, because we have different needs, a different story and a different business". (HR Manager, Elica)

Accordingly, the organizational policies to retain talents are focused on the development of socio-technical systems aimed at motivating workers both intrinsically and extrinsically. Again, talents are conceived as precious resources that might allow to reach organizational goals. That is why companies should try to manage people building a psychological contract based on mutual trust and reciprocal understanding (ex. 18)

16. "We focus on internal development plans, aimed at the development and enhancement of employability of internal resources. Beside this we have compensation solutions and we are implementing welfare policies" (HR manager NH Hotel)
17. "Experience tells us that the first retention factor is managerial ability. Therefore we invest a lot on the training of managers. Another important driver is the reward system. It is important to acknowledge merits and to contribute to the fulfilment of company's goals." (HR Manager, Insiel)
18. "We need to retain the talents that are aligned with our culture. First of all we try to create a pleasant working context then we try to create the best working conditions for the development. In Elica we first manage people by creating a personal relationship based on reciprocal trust, involving everyone in the organizational project. We listen to people. Some time ago, I created a slogan: less assessment and more listening." (HR Manager, Elica)

Finally, from a more 'technical' point of view, managers describe the reward systems they have developed and that might make more concrete the cultural orientation implied in a people-based approach. Nevertheless, even if based on well-known management systems, to be actually effective even compensation and reward policies need to be 'situated' in the social, cultural and organizational context of the company.

19. "We do not talk about predefined tools of total salary and compensation. Rather we would like to develop a system of management and development of talents, aimed at training and enhancing skills, at incresing employability and organizational wellbeing" (HR Manager, NH Hotel)
20. "We are redefining the compensation policies as to make them coherent with three basic principles: inclusion, meritocracy and transparency. It is highly important to invest on the ability of managers to differenciate rewards with respect to actual performances" (HR Manager, Insiel)
21. "We developed a dedicated policy and compensation system, with plans based on merits and with individualized development plans. We adopt job rotation to enrich the skills, international experience and training both inhouse and outside the organizational borders. We have developed also a welfare system. We have a wellness center, a member card with many facilities and dedicated privileges for employees" (HR Manager, Elica)

5   Conclusion

The chapter has aimed to argue for the need to consider organizations as people-based systems.

The review of the abundant literature on the value of intangible assets for organizational success has show that "people come first" even when the main organizational goal is economic growth and competitiveness. Accordingly, to enhance, develop and grow human capital, meant as the whole of individuals' skills and knowledge that makes the difference with the competitors, is the key to have happy, motivated and engaged employees. And this certainly will turn into a better organizational performance.

The theoretical foundations of these assumptions have been further echoed by the voice of the organization. A corpus of interviews with some authoritative HR managers, representatives of multinational companies operating in different commercial domains, has further attempted to argue this point. Old-fashioned management model based

on command and control are outdated, because the working context and the workforce as well have changed.

Accordingly, the future is challenging organizations to rethink their traditional management models fostering new good practices of selection, retention, training and development that restart from the centrality of people. It should be no more only a slogan. Organizations are the people who live in them. It is thanks to their engagement, to their motivations, to their skills and knowledge that the organization could fulfil its goals. Therefore, it is crucial that they learn how to capitalize their precious contribution.

At the same time there are no perfect recipes. Organizations are lively human systems. That is why they are unique, as long as they are sustained by people who are unique as well. Then, the main current challenge of HR management is to know the people who work for the organization, to know their motivations, their beliefs, the meaning they attach to work in order to better plan actions and practices that could be best attuned with these features and that could contribute to reinforce the person/organization fit. Recruiting, training and development initiatives could be a privileged space to establish a relationship with employees, to communicate with them and to share goals and objectives that concretely make the sense of what they do day-by-day.

References

Andriessen, D. (2004). *Making sense of intellectual capital: Designing a method for the evaluation of intangibles*. London: Routledge.

Berger, P., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City, NY: Anchor Books.

Chang, S., & Lee, M. (2007). A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *Learning Organization, 14,* 155–185.

Clifton, J. (2011). *The coming jobs war*. New York, NY: Gallup Press.

Coyle-Shapiro, J., & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship: A large scale survey. *Journal of Management Studies, 37*(7), 903–993.

Dutton, J. E. (2003). *Energize your workplace: How to build high quality connections at work*. San Francisco, CA: Jossey-Bass.

Dutton, J. E. (2005). Fostering high quality connections through respectful engagement. *Stanford Social Innovation Review, 5,* 4–57.

Fernandez, E., Montes, J., & Vasquez, C. (2000). Typology and strategic analysis of intangible resources: A resource-based approach. *Technovation, 20*(2000), 81–92.

Gerbasi, A., Porath, C., Parker, A., Spreitzer, G., & Cross, R. (2015). Destructive de-energizing relationships: How thriving buffers their effect on performance. *Journal of Applied Psychology, 10*(5), 1423–1433.

Gerber, M., Grote, G., Reiser, C., & Raeder, S. (2012). Managing psychological contracts in the era of the "new" career. *European Journal of Work and Organizational Psychology, 21*(2), 195–221.

Harter, J., Schmidt, F., & Hayes, T. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*(2), 268–279.

Harter, J., Schmidt, F., & Keyes, T. (2003). Well-being in the workplace and its relationship to Business outcomes. A review of the Gallup Studies. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the good life* (pp. 205–224). Washington, DC: American Psychological Association.

He, Y., Li, W., & Lai, K. K. (2012). Service climate, employee commitment and customer satisfaction. *International Journal of Contemporary Hospitality Management, 23,* 592–607.

Hosking, D., & Morley, I. (1991). *A social psychology of organizing: People, processes, and contexts*. Harvester Wheatsheaf.

Hosking, D. (2004). Change works: A critical construction. In J. Boonstra (Ed.), *Dynamics of organisational change and learning*. Chichester: Wiley.

Hosking, D. (2011). Telling tales of relations: Appreciating relational constructionism. *Organization Studies, 32*(1), 47–65.

Joo, B., & Lim, T. (2009). The effects of organizational learning culture, perceived job complexity, and proactive personality on organizational commitment and intrinsic motivation. *Journal of Leadership & Organizational Studies, 16*(1), 8–60.

Kurtessis, J., Eisenberger, R., Ford, M., Buffardi, L., Stuart, K., & Adis, C. (2015). Perceived organizational support a meta-analytic evaluation of organizational support theory. *Journal of Management, 43*(6), 1–31.

Lepak, D., & Snell, S. (2002). Examining the human resource Aarchitecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management, 28*(4), 517–543.

Lepak, D., Takeuchi, S., & Snell, S. (2003). Employment flexibility and firm performance: Examining the interaction effects of employment mode. *Environmental Dynamism, and Technological Intensity, Journal of Management, 29*(5), 681–703.

Lindgren, R., Stenmark, D., & Ljungberg, J. (2003). Rethinking competence systems for knowledge-based organizations. *European Journal of Information Systems, 12,* 18–29.

Luthans, F., & Youssef, C. (2007). Emerging positive organizational behavior. *Journal of Management, 33*(3), 321–349.

Manuti, A., Impedovo, M. A., & de Palma, P. D. (2017). Managing social and human capital in organizations: Communities of practices as strategic tools for individual and organizational development. *Journal of Workplace Learning, 29,* 3. doi:10.1108/JWL-07-2016-0062.

Netemeyer, D., Maxham, R., & Lichtenstein, J. (2010). The relationships among manager-, employee-, and customer-company identification: Implications for retail store financial performance. *Journal of Retailing, 86*(1), 85–93.

Noe, R., Hollenbeck, B., Gerhart & Wright, P. (2006). *Human resource management: Gaining a competitive advantage*. Burr Ridge, IL: Richard D. Irwin.

Paarlberg, L., & Perry, J. (2007). Values management. *Aligning Employee Values and Organization Goals, The American Review of Public Administration, 37*(4), 387–408.

Pfeffer, J. (1995). *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.

Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. (2011). Thriving at work: Toward its measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior, 33*(2), 250–275.

Quinlan, M., & Bohle, P. (2009). Overstretched and unreciprocated commitment: Reviewing research on the occupational health and safety effects of downsizing and job insecurity. *International Journal of Health Services, 39*(1), 1–44.

Quinn, R., Spreitzer, G., & Lam, C. (2012). Building a sustainable model of human energy in organizations: Exploring the critical role of resources. *Academy of Management Annals, 6*(1), 337–396.

Ray, G., Barney, J., & Muhanna, W. (2004). Capabilities. *Business Processes and Competitive Adavantage: Choosing the dependent variable in empirical tests of the resource-based view, Strategic Management Journal, 25,* 23–37.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698–714.

Riggle, R., Edmonson, D., & Hansen, J. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research, 62*(10), 1027–1030.

Salanova, M., Llorens, S., Cifre, E., & Martinez, I. (2012). We need a hero! Toward a validation of the healthy and resilient organization (HERO) model. *Group and Organization Management, 37*(6), 785–822.

Schneider, B., Ehrhart, M., Mayer, D., Saltz, J., & Niles-Jolly, K. (2005). Understanding organization-customer links in service settings. *Academy of Management Journal, 48*(6), 1017–1032.

Sonenshein, S., Dutton, J. E., Grant, A. M., Spreitzer, G. M., & Sutcliffe, K. M. (2013). Growing at work: Employees' interpretations of progressive self-change in organizations. *Organization Science, 24*(2), 552–570.

Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Organization Science, 16,* 537–549.

Spreitzer, G., & Porath, C. (2012). Creating sustainable performance. *Harvard Business Review, 90,* 92–99.

Spreitzer, G. M., Porath, C. L., & Gibson, C. B. (2012). Toward human sustainability. *Organizational Dynamics, 41*(2), 155–162.

Spreitzer, G. M., & Porath, C. (2013). Self-determination as nutriment for thriving: Building an integrative model of human growth at work. In M. Gagné (Ed.), *Oxford handbook of work engagement, motivation, and self-determination theory*. New York, NY: Oxford University Press.

Vigoda-Gadot, E. (2007). Leadership style, organizational politics, and employees' performance. *Personnel Review, 36*(5), 661–683.

Weick, K. (1979). *The social psychology of organizing*. Reading, MA: Addison-Wesley.

Wright, P., Gardner, T., & Moynihan, L. (2003). The impact of HR practices on the performance of business units. *Human Resource Management Journal,* 13(3), 21–36.

2

The Cognitive Technology Revolution: A New Identity for Workers

Abstract Framing the socio-cultural and economical revolution brought about by cognitive technologies, the chapter aims to discuss the redefinition of workers' identity and the meaning they attach to work. Yet, authoritative studies in the field show that work experience represents a symbolic space for the development of personal and social identity. The emergence of new technology-based working modalities has concretely redesigned the role played by people at work. Moreoever, this change is also framed within the discussion about an unavoidable clash between different generations of workers (namely baby boomers, gen x and millenials) who are animated by different values, different expectations and technological skills. Therefore, the chapter discusses challenges and potentialities associated with this revolution, highlighting how the questions posed by technologies will also impose a redefinition of HRM practices.

Keywords Identity · Meaning of working · Career · Generational clash Technologies

1   Introduction: A New Context of Work

Change is an evidence in the current labor market. Within the last decades, due to both intrinsic and extrinsic factors, many challenges have redesigned the cultural, economical and social scenario of the present working context, posing new questions to both scholars and practitioners.

Capital phenomena have been the radical globalisation of markets and the economical crisis that have pushed organizations to change their management models, to reduce costs and often to downsize in order to stay competitive. On the other hand, in many cases, these events have also pushed workers to experience the negative side of these changes, that have often turned into feelings of job insecurity and precariousness (Sverke and Hellgren 2002; Silla et al. 2005).

Another relevant feature of current labor market is the rapid diffusion of technology, that has profoundly impacted on the concrete organization of work, as for instance through the introduction of smart working modalities, that have consequently blurred the boundaries between working and non working time. Moreover, technology has even contributed to redesign processes and tasks, posing new demands in terms of skills and abilities to workers and often substituing people with machines. However, far from an apocalyptic view of technology, a more valuable approach may be to view machine and human intelligence as complementary (Guszcza et al. 2017). Accordingly, workers plan actions, manage objectives and control performance. Machines can do the routinizable work that is indispensable to prepare the way for insights and decisions in technical and scientific thinking. In this vein, this symbiotic partnership between humans and technologies allow to maximise the efficiency of any performance. Therefore, leading to what some enthusiastically call the "augmented workforce" (Schwartz et al. 2017). Likewise, it is evident that the massive introduction of technology in the workplace brings about many implications both for people and organizations. On the one hand, technology has led to profound restructuring processes in terms of elimination of workforce units. On the other, in many cases, it has produced demotivation and challenging demands to workers who are called to use technology, to get

accustomed to it and/or to accept the substitution of the human contribution (Morris and Venkatesh 2000; Burke and Ng 2006; Orliwoski 2007).

Finally, other crucial factors that have contributed to redesign the labor market phisionomy are connected with the changing identity of the workforce. Women, immigrants, young people at present are significant actors within the labor market. Therefore, their active presence poses different demands in terms of work-life balance, diversity management, generational changes in values and aspirations. Abundant literature has documented the difficulties and biases connected with the cohabitation between men and women (Heilman 2012) and between natives and immigrants in the workplace (Konrad 2006).

However, a growing body of research is currently concentrating on another emergent issue: the clash between young and mature workers (see for instance a special issue on the topic edited by Schalk and colleagues in 2010). Accordingly, it is evident that the average duration of the active working life has recently increased, therefore in many organizational settings mature workers have to live together with younger workers. This fact could be a challenge for the working context as long as these two categories are profoundly different in terms of skills, motivations and expectations. Indeed, differently from mature workers, young workers, the so-called millenials, are often over-educated, highly ambitious, open to teamwork and technology-oriented (Deal et al. 2010; Hershatter and Epstein 2010). Consequently, if not properly managed by the organization, reciprocal age stereotyping could negatively impact on job performance and organizational success (Chiu et al. 2001; Brooke and Taylor 2005; Van Dalen et al. 2009; Ng and Feldman 2012).

Moving from these premises, the present chapter aims at discussing the changes triggered by the economical, cultural and social transformations experienced by the labour market and parallel at focusing on the generational differences featuring the current workforce. Further, the chapter contend that human resource management need to reconsider policies and practices in light of these different individual needs and changed working conditions.

2   A New Workforce

Among the several changes introduced above, the transformation of the workforce consequent to the entry of the Millennial Generation has received increasing attention (Harris-Boundy and Flatt 2010). Under this label are encompassed young workers born between 1979 and 1994 (Smola and Sutton 2002), who are also named Generation Y, NetGen, Nexters, and the Nexus Generation (Barnard et al. 1998; Burke and Ng 2006; Zemke et al. 2000).

Accordingly, scientific literature and public press have devoted much attention to this generation, producing increasing discussion about their features, their attitudes, and the meaning they attach to work.

Some studies have argued that Millennials are self-important, impatient, and disloyal (Hill 2008; Howe and Stauss 2007)—this is the reason why some authors call them also *"Generation Me"* to strike their narcissism, assertiveness and extreme self-confidence (Trzesniewski et al. 2008). Others state that they are ambitious, that they value organizational training and development, that they prefer meaningful work, and seek for personal fulfillment on the jobs (Hauw and Vos 2010; Loughlin and Barling 2001; Rawlins et al. 2008).

Coeherently with these findings, an important stream of research focused on Millennials' work attitude, as long as this focus could be very informative to interpret their organizational behavior and thus to plan adequate human resource management programmes. These studies show that young people belonging to this generation display higher levels of individualism than collectivism (Ng et al. 2010), that they are motivated by significant tasks, and expect accommodations by organizations based upon their experiences, needs, and desires (Hershatter and Epstein 2010; Myers and Sadaghiani 2010; De Hauw and De Vos 2010). Furthermore, Millenials generally report higher levels of overall company satisfaction and satisfaction with job security, recognition, and career advancement than previous generations, namely as compared with X Generation and Baby Boomers, that is workers born between 1965 and 1980 (Kowske et al. 2010). Finally, Millenials are extremely familiar with technology, being the first generation to be born into

 a wired world: they generally prefer open and frequent communication, being connected 24-hours-a-day (Deal et al. 2010; Myers and Sadaghiani 2010).

In view of these abundant evidences, the profile of this new workforce, the differences with the older generations, currently considered experts and managers, and the practices and policies adopted by organizations to manage those differences, are strategic factors to determine how an organization will develop and be successful in the near future (Myers and Sadaghiani 2010; Murray 2011; Hillman 2014).

Indeed, it is uncontestable that Baby Boomers, X Generation and Millenials experience work differently as long as they live a different cultural, social and organizational context, resulting in different value systems.

Accordingly, the Baby Boomer generation, that is individuals aged between 50 and 70, grew up in paternalistic environments featured by values of community involvement and the absolute centrality of the company (Howe and Strauss 2000). They believe in a command-and-control management approach and value hard work and tend to be exceptionally attached to their employer. This generation values working individually, views managers as experts and looks to the employers for career planning. BabyBoomers like clear boundaries and have a generally inward-looking perspective. They are more concerned about money and recognition than other generations, they prefer job security and consider career advancement as a gradual progression (Yu and Miller 2005).

Conversely, GenXers, namely workers aged between 35 and 50, tend to emphasize the value of job satisfaction, quality of life, and workplace empowerment (Yu and Miller 2005). This generation experienced a more insecure labor market, characterized by economical turbulence and job precariousness, that is why, with respect to Baby Boomers, GenXers are more individualist (Jurkiewicz and Brown 1998). Loyalty is still a value for them but they are loyal to their profession as opposed to their employer, they seek opportunities to improve their individual work skills instead of advancing their organization (Yu and Miller 2005). The individualistic nature of GenXers results in the preference to work alone and favor the individual over the group and or organization (Howe and Strauss 2000). GenXers expect educational rewards,

job challenges, and rapid promotion, higher salaries and flexible work arrangements (Jennings 2000).

In this perspective, Millenials get this legacy. They seek for challenging work and are self-focussed. However, differently from both previous generations, they typically hold a global perspective on life and seek meaningful roles on teams consisting of highly committed, motivated coworkers (Martin 2005). Millennials care more about creative expression than leadership roles in organizations (Downing 2006).

They effectively work as a members of a team and thrive in a supportive and nurturing environment that promotes teamwork (Hershatter and Epstein 2010). Millennials prioritize the success and welfare of the team above personal attainment (Deal et al. 2010; Gilbert 2011).

They are entrepreneurial thinkers who demand autonomy, responsibility, immediate feedback, expect a frequent sense of accomplishment, and have a high need for organization engagement and support (Martin 2005). Although Millennials have an urgent sense of immediacy, they adapt well to new people, places, and circumstances, thriving in environments with consistent change. As such, Millennials are beneficial to companies undergoing change processes. Moreover, as already stressed, Millennials are considered a digital generation in which technology shapes their way of life (Oblinger 2003). They possess an "information-age mindset" as long as they have developed a symbiotic relationship with technology and use it far more often than those of previous generations, actually becoming an *"App Generation"* (Gardner and Davies 2013). Due to unremitting use of technology, Millennials are often multitasking between mobile devices, engaging in social media, or browsing the Internet. Technology has made an abundance of information readily available, and the Millennial generation has consequently developed the ability to rapidly obtain and filter the material to acquire the desired information (Hershatter and Epstein 2010). And this is a very precious and desirable skill for organizations. They are tech-savvy multi-taskers because that is all they have ever known. They don't view managers as content experts (like their predecessors) because they know where to find multiple versions of the information, they are continuous learners. Instead, they view managers more as coaches and mentors. They are also the most educated generation in history. And thanks to

technology, they are aware of their own vast numbers and their impact on the environment. This generation is socially conscious and expects their employers to act in socially conscious ways.

Differently from previous generations who take an individualistic approach to life and work, Millennials prefer collaboration, team-based work projects and an unstructured flow of information at all levels. They have an outward -looking perspective and interact with an extensive network of communities beyond their employer, which may be interpreted by other generations as a lack of dedication or loyalty. While Baby Boomers and GenXers want job security and structure, Millennials seek employability and flexibility. Millennials want to continually add to their skills in meaningful ways. For them, work is not merely a way to get an income, it is rather an opportunity to enrich and fulfil personal goals.

However, what makes Millennials unique -their tech-savvy, multi-tasking, collaborative approach to life—may cause some challenges in the workplace. First of all, a clash with previous generations of workers who are still employed in the same organization and that maybe by adopting different interpretative repertoires of work experience will not so easily understand the wind of change brought about by the younger colleagues.

3 A New Meaning of Work

An evident conclusion of the discussion drawn in the previous section is that the labor market is certainly changing together with the features of the workforce actively involved in it.

The main consequence of such radical change is a redefinition of the meaning attached to work experience, meant as a set of "shared interpretations of what people want and expect from work" (Ruiz-Quintanilla and Claes 2001, p. 335) that are predictive for both individuals' actions and group processes. According to this view, indebted to the authoritative study of the Meaning of Working Team (1987), people not only develop work meanings because of their experiences with work, but also use work meanings as a filter in their interaction with

social structures and organizations. Therefore, from a subjective point of view, the Meaning of Working is a personal 'work ethic' (England and Whitely 1990), determined by the choices and experiences of individuals as well as the organizational and environmental context in which they work and live. In this vein, a generational difference in the meaning of working is to be expected. And indeed there is, as well documented by the literature (Macky et al. 2008; Twenge 2010; Twenge et al. 2010; Parry and Urwin 2011; Cogin 2012).

Accordingly, the meaning of working is a multicomposite construct encompassing Work Centrality, Work Goals, Societal Norms about Work, Work Role Identification, and Working Outcomes. Following the heuristic model developed by the Team these are the core variable of the meaning of working that are heavily influenced by some antecedents (e.g. one's personal and family situation, one's present job and career history, and one's macro socio-economic environment) and in turn are responsible in producing some consequences (e.g. subjective expectations about future working situations and objective outcomes of working).

Recent studies (Twenge 2010) confirm a different configuration of the meaning attached to work, showing that Millenials attribute a less central role to work in their lives, value leisure more, and express a weaker work ethic than Boomers and GenXers (Levenson 2010). However, Millennials prefer opting to work in positions that are not well-paid or career-oriented but rather are enjoyable, satisfying, and integrate work-life balance (Chalofsky and Cavallaro 2013). Millennials seek work that is meaningful and solidifies their self-efficacy. In absence of these conditions, they value extrinsic work values of work (e.g., salary, job promotion) more than intrinsic ones and consider work more as an entitlement rather than as an obligation. Millenials are consistently higher in individualistic traits, thus confirming a popular conception that consider them more self-centered than previous generations.

Therefore, in view of these relevant differences, the entering of Millenials is not merely a social phenomenon, that contributes to refresh the workforce. This fact is fundamentally changing organizations and the way business will be conducted in the near future. Consequently, these findings should be carefully considered as long as

HR practices and policies designed to attract, develop and retain this vast cohort must change to reflect this generation's meaning of working.

4   A New Career Identity

The generational change in the meaning of working has coincided with a consequent transformation of the traditional organizational career model into a "new career" model characterized by increased individual agency, flexibility of career paths and greater mobility across career boundaries both with reference to jobs and organizations (Briscoe and Finkelstein 2009).

The traditional view of career conceives the latter as a linear upward progression from job to job within a single organization with increasing status, wider responsibility and higher pay (Baruch 2004). This "corporate" view, featuring research on career for most of the twentieth century (Baruch and Bozionelos 2011), has established a psychological contract that considers the employer as the provider of stability and opportunities in exchange for the individual's effort and long-term commitment (Capelli 1999). Consequently, work processes are organized according to a strict division of labor, and career paths are designed to reward employee loyalty with upward mobility in terms of income and status (Chudzikowski 2012).

In recent decades, the factors echoed earlier, namely globalization, technological advances, increased workforce diversity, emphasis on knowledge work, outsourcing and the contingent workforce, have contributed to transform this traditional career pattern (Burke and Ng 2006; Sullivan and Baruch 2009).

Organizations have become flatter and more flexible and consequently individuals have been pushed to engage in mobile careers (Baruch and Bozionelos 2011).

As a consequence, the traditional psychological contract that has guaranteed long-term employment in exchange for loyalty and engagement has ben replaced by a new deal: experience and competencies in exchange for employability occasion and short-term engagement (Baruch 2004; Capelli 1999; Moses 1997). Careers have become

boundaryless (Arthur and Rousseau 1996) both in terms of mindset and physical mobility across organizations or professions (Sullivan and Arthur 2006). This requires extremely flexible competencies, a sense of adaptability, a personal identification with meaningful work, an orientation to action learning, the development of strong social networks and individual responsibility for career management (Sullivan 1999).

An evident implication of the new career perspective is that modern careers engender much more mobility than was those of the past (Chudzikowski 2012). Accordingly, it is not only a physical mobility, rather it encompasses job changes (i.e. changes of work responsibilities, hierarchical level or title within an organization), organization changes (i.e. changes in one's employer) and occupation changes (i.e. changes that require fundamentally new skills, routines, work environments, training, education or vocational preparation) (Feldman and Ng 2007). Job mobility can be further characterized in terms of "status" changes, being upward, downward or lateral in terms of status, esteem, responsibilities, and financial rewards (Feldman and Ng 2007). In view of this, high career mobility has become the "new normal" (Inkson et al. 2012). However, whether it is desirable (Chudzikowki 2012) or it is 'bounded' by the occupational contraints and by the current job opportunites (King et al. 2005) is still a matter of debate (Inkson et al. 2012; Sullivan and Baruch 2009).

Certainly, these reflections could be considered a further factor striking intergenerational differences, as long as the meaning attached to career is strictly linked to the different career and life stages experienced when these changes took place (Howe and Strauss 2007).

Therefore, again, recalling the generational difference between Baby Boomers, GenXers and Millenials some evident differences could be observed even with respect to career management.

Baby Boomers have entered the workforce in the post-war period, benefitting from an era of prolonged economic growth. Therefore, they have enjoyed several opportunities for promotion and have mostly experienced long-term employment within single organizations (Kupperschmidt 2000; Lancaster and Stillman 2003). Yet, they have experienced a general pattern of lower mobility and upward movement in terms of status and responsibility relative to subsequent generations (Lyons et al. 2012).

Differently, in the early 1980s, when the first of the GenXers have entered the labor force, unemployment rates were almost double with respect to those faced by young Boomers two decades earlier. They have entered the labor force at the advent of the "post-corporate-career," and therefore focussed more on their employability than on advancing within corporate hierarchies (Lancaster and Stillman 2003; Moses 1997).

Because of these features, this generation has been featured as "job-hoppers", as long as they change jobs and employers frequently in order to gain new skills to pursue opportunities and to develop skills (Kupperschmidt 2000; Lancaster and Stillman 2003; Lyons et al. 2012).

Since the late-1990s and the 2000s, when Millenials have first started to enter the labor market the situation changed again. Actually, this generation has found a highly competitive labor market, with an increasing proportion of overeducated and overskilled workers. They are highly mobile, expect great change and variety in their job assignments (Lancaster and Stillman 2003), and are impatient in terms of career advancement (Ng et al. 2010). They are also said to emphasize work-life balance and make career decisions that favor lifestyle and leisure over upward career progression (Ng et al. 2010; Twenge et al. 2010; Lyons et al. 2012, 2015; Becton et al. 2014).

5   Conclusion

The emphasis on the changing identity of the labor market and on the features of the workforce currently living in it has led us to share the need the reconsider management models and HR practices as well.

In view of the different value systems and of the different working approach of this cross-generational workforce managers should carefully decide how to manage the cohabitation and to exploit skills and knowledge of both generations in line with the organizational goals.

A first suggestion coming from the analysis of the literature could be that of exploiting the relational dimension inbuilt in many working practices to foster collaboration and skill transfer. For instance, as long as Millenials are open to communication and request constant feed back and Boomers and GenXers are mature and expert workers who are

still willing to transfer knowleged, mentoring programmes could allow to concile these views. Recent investigations show that 'reverse mentoring', meant as a form of 'social exchange' of skills and expertise between younger and older workers, could be precious in keeping Millennials engaged in their work and at the same time in motivating mature workers who are generally resist to the concurrent advent of Millenials (Chadhuri and Ghosh 2012).

Furthermore, organizations could exploit the natural vocation Millenials have for collaboration by empowering for example communities of practice inside the organizational context. Although largely spontaneous, if properly sustained by the organization and attuned with the organizational culture, communities could be a precious space to manage human capital, to create engagement and to empower motivations of all members (Manuti et al. 2017).

Finally, the challenge for managers and leaders is not only to understand the differences between the generations but also to embrace their different perspectives and find ways to bring out the best in everyone.

References

Arthur, M., & Rousseau, D. (1996). *The boundaryless career*. New York: Oxford University Press.

Barnard, R., Cosgrove, D., & Welsh, J. (1998). *Chips & pop: Decoding the nexus generation*. Toronto: Malcolm Lester Books.

Baruch, Y. (2004). Transforming careers: From linear to multidirectional career paths: Organizational and individual perspectives. *Career Development International, 9*(1), 58–73.

Baruch, Y., & Bozionelos, N. (2011). Career issues. In S. Zedeck (Ed.), *Handbook of industrial and organizational psychology* (Vol. 2, pp. 67–113). Washington, DC: American Psychological Association.

Becton, J., Walker, H., & Jones-Farmer, A. (2014). Generational differences in workplace behavior. *Journal of Applied Social Psychology, 44*(3), 175–189.

Briscoe, J., & Finkelstein, L. (2009). The "new career" and organizational commitment: Do boundaryless and protean attitudes make a difference? *Career Development International, 14*(3), 242–260.

Brooke, L., & Taylor, P. (2005). Older workers and employment: Managing age relations. *Aging & Society, 25*(3), 415–429.

Burke, R., & Ng, E. (2006). The changing nature of work and organizations: Implications for human resource management. *Human Resource Management Review, 16,* 86–94.

Capelli, P. (1999). Career jobs are dead. *California Management Review, 42*(1), 146–167.

Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology, 23*(8), 891–906.

Chadhuri, S., & Ghosh, R. (2012). Reverse mentoring: A social exchange tool for keeping the boomers engaged and millennials committed. *Human Resource Development Review, 11*(1), 55–76.

Chalofsky, N., & Cavallaro, L. (2013). A good living versus a good life meaning. *Purpose, and HRD, Advances in Developing Human Resources, 15*(4), 331–340.

Chiu, W., Chan, A., Snape, E., & Rendman, T. (2001). Age stereotypes and discriminatory attitudes towards older workers: An East-West comparison. *Human Relations, 54*(5), 629–661.

Chudzikowki, K. (2012). Career transitions and career success in the 'new' career era. *Journal of Vocational Behavior, 81*(2), 298–306.

Cogin, J. (2012). Are generational differences in work values fact or fiction? *Multi-country evidence and implications, The International Journal of Human Resource Management, 23*(11), 2268–2294.

De Hauw, S., & De Vos, A. (2010). Millennials' Career perspective and psychological contract expectations: Does the recession lead to lowered expectations? *Journal of Business and Psychology, 25*(2), 293–302.

Deal, J., Altman, D., & Rogelberg, S. (2010). Millennials at work: What we know and what we need to do (if anything). *Journal of Business and Psychology, 25*(2), 191–199.

Downing, K. (2006). Next generation: What leaders need to know about the millennials. *Leadership in Action, 26*(3), 3–6.

England, G., & Whitely, W. (1990). Cross-national meanings of working. In A. P. Brief & W. R. Nord (Eds.), *Meanings of occupational work* (pp. 65–106). Lexington, MA: Lexington Books.

Feldman, D., & Ng, T. (2007). Careers: Mobility. *Embeddedness, and Success, Journal of Management, 33,* 350–377.

Gardner, H., & Davis, K. (2013). *The app generation: How today's youth navigate identity, intimacy, and imagination in a digital world*. New Haven, CT: Yale University Press.

Gilbert, J. (2011, September–October). The millennials: A new generation of employees, a new set of engagement policies. *Ivey Business Journal: Improving the Practice of Management*, 1–3. Retrieved from http://www.iveybusinessjournal.com/topics/the-workplace/the-millennials-a-new-generation-of-employees-a-new-set-of-engagement-policies.

Goldgehn, L. (2004). Generation who, what, Y? What you need to know about generation Y. *International Journal of Educational Advancement, 5*(1), 24–34.

Guszcza, J., Lewis, H., & Evans-Greenwood, P. (2017). *Cognitive collaboration why humans and computers think better together*, Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/deloitte-review/issue-20/augmented-intelligence-human-computer-collaboration.html.

Harris-Boundy, J., & Flatt, S. J. (2010). Cooperative performance of Millennials in teams. *Review of Business Research, 10*, 30–46.

Hauw, S., & Vos, A. (2010). Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations? *Journal of Business and Psychology, 25*(2), 293–302.

Heilman, M. (2012). Gender stereotypes and workplace bias. *Research in Organizational Behavior, 32,* 113–135.

Hershatter, A., & Epstein, M. (2010). Millennials and the world of work: An organization and management perspective. *Journal of Business and Psychology, 25*(2), 211–223.

Hill, L. A. (2008). Where will we find tomorrow's leaders? *Harvard Business Review, 23*, 123–129.

Hillman, D. (2014). Understanding multigenerational work-value conflict resolution. *Journal of Workplace Behavioral Health, 29*(3), 240–257.

Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.

Howe, N., & Stauss, W., (2007, July–August). The next 20 years. How customer and workforce attitudes will evolve. *Harvard Business Review*, pp. 41–52.

Inkson, K., Gunz, H., Ganesh, S., & Roper, J. (2012). Boundaryless careers: Bringing back boundaries. *Organization Studies, 33*(3), 323–340.

Jennings, A., (2000, February). Hiring generation X. *Journal of Accountancy*, pp. 55–59.

Jurkiewicz, C., & Brown, R. (1998). Generational comparisons of public employee motivation. *Review of Public Personnel Administration, 18*(4), 18–37.

King, Z., Burke, S., & Pemberton, J. (2005). The 'bounded' career: An empirical study of human capital, career mobility and employment outcomes in a mediated labour market. *Human Relations, 58*(8), 981–1007.

Konrad, A. (2006). Leveraging workplace diversity in organizations. *Organization Management Journal, 3*(3), 164–169.

Kowske, B., Rasch, R., & Wiley, J. (2010). Millennials' (lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of Business and Psychology, 25*(2), 265–279.

Kupperschmidt, B. (2000). Multigeneration employees: Strategies for effective management. *The Healthcare Manager, 19*(1), 65–76.

Lancaster, L., & Stillman, D. (2003). *When generations collide: How to solve the generational puzzle at work*. HarperCollins: New York.

Levenson, A. (2010). Millennials and the world of work: An economist's perspective. *Journal of Business and Psychology, 25*(2), 257–264.

Loughlin, C., & Barling, J. (2001). Young workers' work values, attitudes, and behaviours. *Journal of Occupational and Organizational Psychology, 74*(4), 543–558.

Lyons, S., Schweitzer, L., Ng, E., & Kuron, L. (2012). Comparing apples to apples: A qualitative investigation of career mobility patterns across four generations. *Career Development International, 17*(4), 333–357.

Lyons, S., Schweitzer, L., & Ng, E. (2015). How have careers changed? An investigation of changing career patterns across four generations. *Journal of Managerial Psychology, 30*(1), 8–21.

Macky, K., Gardner, D., & Forsyth, S. (2008). Generational differences at work: Introduction and overview. *Journal of Managerial Psychology, 23*(8), 857–861.

Manuti, A., Impedovo, M. A., & de Palma, P. D. (2017). Managing social and humancapital in organizations Communities of practices as strategic tools for individual and organizational development. *Journal of Workplace Learning, 29*(3), 217–234.

Martin, C. A. (2005). From high maintenance to high productivity: What managers need to know about Generation Y. *Industrial and Commercial Training, 37,* 39–44.

Meaning of Working Research Team. (1987). *The meaning of working*. London: Academic Press.

Morris, M., & Venkatesh, V. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel Psychology, 53*(2), 375–403.

Moses, B. (1997). *Career intelligence: Mastering the new work and personal realities*. Toronto: Stoddard.

Murray, A. (2011). Mind the gap: Technology, millennial leadership and the cross-generational workforce. *The Australian Library Journal, 60*(1), 54–65.

Myers, K., & Sadaghiani, K. (2010). Millennials in the workplace: A communication perspective on millennials' organizational relationships and performance. *Journal of Business and Psychology, 25*(2), 225–238.

Ng, T., & Feldman, D. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology, 65*(4), 821–858.

Ng, E., Schweitzer, L., & Lyons, S. (2010). New generation great expectations: A field study of the millennial generation. *Journal of Business and Psychology, 25*(2), 281–292.

Oblinger, D. (2003). Boomers, Gen-Xers, Millenials. Understanding the new students. *Educase*, 37–47.

Orliwoski, W. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies, 28*(9), 1435–1448.

Parry, E., & Urwin, P. (2011). Generational differences in work values: A review of theory and evidence. *International Journal of Management Review, 13,* 79–96.

Rawlins, C., Indvik, J., & Johnson, P. (2008). Understanding the new generation: What the millennial cohort absolutely, positively must have at work. *Journal of Organizational Culture, Communications and Conflict, 12*(2), 1–8.

Ruiz-Quintanilla, S., & Claes, R., (2001). Mow research programs. In J. Katz & A. Corbett (Eds.) *Databases for the study of entrepreneurship. Advances in Entrepreneurship, Firm Emergence and Growth* (Vol. 4, pp. 335–339). London: Emerald Group Publishing Limited.

Schalk, R., van Veldhoven, M., de Lange, A., De Witte, H., Kraus, K., Stamov-Roßnagel, K., et al. (2010). Moving European research on work and ageing forward: Overview and agenda. *European Journal of Work and Organizational Psychology, 19*(1), 76–101.

Schullery, N. (2013). Workplace engagement and generational differences in values. *Business Communication Quarterly, 76*(2), 252–265.

Schwartz, J., Collins, L., Stockton, H., Wagner, D., & Walsh, B. (2017). *The future of work: The augmented workforce 2017 Global Human Capital Trends*, Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2017/future-workforce-changing-nature-of-work.html.

Shuck, B., & Herd, A. (2012). Employee engagement and leadership exploring the convergence of two frameworks and implications for leadership development in HRD. *Human Resource Development Review, 11*(2), 156–181.

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Shuck, B., & Wollard, K. (2010). Employee Engagement and HRD: A seminal review of the foundations. *Human Resource Development Review, 9*(1), 89–110.

Silla, I., Gracia, F., & Peiro, J. (2005). Job insecurity and health-related outcomes among different types of temporary workers. *Economic and Industrial Democracy, 26*(1), 89–117.

Smola, K., & Sutton, C. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of Organizational Behavior, 23*(4), 363–382.

Sullivan, S. E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management, 25,* 457–484.

Sullivan, S., & Arthur, M. (2006). The evolution of the boundaryless career concept: Examining physical and psychological mobility. *Journal of Vocational Behavior, 69*(1), 19–29.

Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management, 35,* 1542–1571.

Sverke, M., & Hellgren, J. (2002). The nature of job insecurity: Understanding employment uncertainty on the brink of a new millennium. *Applied Psychology: An International Review, 51*(1), 23–24.

Trzesniewski, K., Donnellan, M., & Robins, R. (2008). Is "Generation Me" really more narcissistic than previous generations? *Journal of Personality, 76*(4), 903–918.

Twenge, J. (2010). A review of the empirical evidence on generational differences in work attitudes. *Journal of Business Psychology, 25,* 201–210.

Twenge, J., Campbell, S., Hoffman, B., & Lance, C. (2010). Generational differences in work values: Leisure and extrinsic values. *Increasing, Social and Intrinsic Values Decreasing, Journal of Management, 36*(5), 1117–1142.

Van Dalen, H., Henkens, K., & Schippers, J. (2009). Dealing with older workers in Europe: A comparative survey of employers' attitudes and actions. *Journal of European Social Policy, 19,* 47–60.

Yu, H., & Miller, P. (2005). Leadership style: The X generation and baby-boomers compared in different cultural contexts. *Leadership and Organization Development Journal, 26*(1), 35–50.

Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work: Managing the clash of Veterans, Boomers, Xers, and Nexters in your workplace*. New York: AMACOM.

3

The Cognitive Technology Revolution: A New Role of HR Practices?

Abstract This chapter aims to discuss the negative and positive aspects connected to the cultural turn toward the cognitive intelligence era in organizations. The opportunities granted by technology-based people management practices (e.g. Watson, big data, etc.) are critically analysed in the attempt to redefine the role of human resource management as an organizational strategic asset. The authors see positively the affordances granted by technology as long as HRM practices would succeed in integrating them within the organizational vision. An concrete example is given by organizational network analysis, that might support organizations in investigating informal network and in planning adequate HRM practices.

1   Introduction

Digital transformation is investing the labor market and the companies radically redesigning working processes and practices and consequently challenging corporate culture, meant as "the way we do things around here" (Schein 2004).

Yet, as already discussed in the previous chapters, digital transformation, together with many other cultural and social phenomena taking place within the last decades, have imposed a revisitation of most traditional organizational assets. The erosion of the traditional conception of a linear and stable career, a different centrality attributed to work experience within one's life with respect to life, a generational clash between young and adults at work are only some of the factors that are challenging organizations to find new ways to attract, retain, motivate the workforce. Consequently, a careful reconsideration is needed about the role of HR as strategic function of the organization, as the tool that could help organizations in leading people through change (Stephan et al. 2016). Infact, it is self-evident that cognitive technologies are changing the way people work and think about work. The shift to the digital "appification" and the use of SMAC technologies (social, mobile, analytics and cloud) are making work easier, real-time, more productive, and more rewarding. In the meanwhile, through mobile technology organizations could observe and manage a lot of useful data about the workforce (Guszcza et al. 2017). Apparently this evidence could heavily challenge the existence of the HR, or at least for a rather simplyfied conception of it, traditionally seen as a soft function within the organizational asset with respect to other more business-centred functions. Technology could do the same job of a HR manager, better an faster. This is the provocation that most scholars sustain, declaring the death of HR (Caudron 2003) and considering this function mostly as an "unnecessary evil" (Hammonds 2005). However, the same authors content that the HR function has a potential and that "if it changes, it (…) will be more potent that ever" (Caudron 2003, 3). As already Peter Drucker wrote in his authoritative contribution "The practice of Management" published in 1954, the radical transformations

of the labor market and the ever-changing needs of the organization urge HR to be repositioned and "to provide leadership to the increasingly important role of human capital in organizations" (Rothwell et al. 2008: XIII). Coherently, Lawler et al. (2006) underline that only the HR function could assure competitive advantage to organizations if it helps to see things "through the lens of people and talents" (p. 3). Certainly, this is true to the extent that HR function would be able to abandon a traditional old-fashioned approach to compensation, job design, talent management and career advancement and to align these practices with the emergent needs of a radically different workforce.

Fletcher (2005), for instance, proposes that far from being simply focused on personnel administration, human resources (HR) should evolve into human capital management (HCM), thus pursuing a total company value redefining its historical role within the organization: from a policeman that focused on efficiency and control (in the 70s), to a partner that might enable insight (in the 80s and 90s), to a player that allows creating a strategic value (from 2000 on). In this vein, "where HR was the responsibility of a centralized, or sometimes decentralized, department, HCM is the job of everyone in the business, from employees to executives" (p. 2).

In line with these evidences, this chapter aims to discuss the need for HR to rethink itself and to exploit the opportunities that the cognitive technology revolution might give to people management practices (e.g. exploiting people analytics, watson, big data, etc.).

2 Digital Processing and the Use of People Analytics and Big Data in HRM

Within the last decades, the rapid advacements of information technology has concretely transformed working contexts, processes and structures, thus mostly resulting in a redefinition of plants, tasks, roles and responsibilities. Consequently, this has also pushed many organizations to rethink the way they manage their human resources if several challenges and opportunities are inevitably linked to this revolution (Bondarouk and Ruel 2009; Manuti and de Palma 2016).

An evident example of such revolution is the widespread adoption of cloud HR systems, that is transforming HR into "intelligent platforms" (Collins et al. 2017). People analytics are used to manage a wide range of business challenges: from recruiting to performance measurement, from compensation to workforce planning and retention. Companies are investing heavily in programs to use data, such as "Organizational Network Analysis" (ONA) and "interaction analytics", studying employee behaviors to better understand opportunities for business improvement.

Actually, people analytics, namely a practice that started as a technical discipline mastered by a small group of people to analyze engagement and retention, has rapidly become a mainstream HR practice. People analytics also known as talent analytics or HR analytics is a method of analytics that managers and executives use to make decisions about their employees or workforce. From a pragmatic point of view, people analytics applies statistics, technology and expertise to large sets of talent data, which results in making better management and business decisions for an organisation. People analytics is a new domain for most HR departments. Companies are looking to better drive the return on their investments in people and consequently are redesigning their technical analytics to build out digitally powered enterprise analytics solutions. These new solutions, whether developed internally or embedded in new digital solutions, enable organizations to conduct real-time analytics at the point of need in the business process. This allows for a deeper understanding of issues and actionable insights for the business.

In view of this, people analytics has grown: it is no more simply the task of a technical specialist group, rather it has become a core business function that must meet the needs of many stakeholders throughout the company. In short, the ability to analyze huge amounts of data is becoming a business-wide function, not limited to HR.

More and more analytics is from "pull" to "push," where the analytics team no longer simply builds models but now develops tools that help managers and employees to see relevant data in real time (Bersin et al. 2017). This revolution is pushing HR to take on a larger role in organizations, helping companies "to *be* digital, not just *do* digital" (Volini et al. 2017, 87). Yet, HR

are called to lead this digital transformation, fostering change in three areas: digital workforce, digital workplace and digital HR. More specifically, HR are called to support organizations in driving new management practices—the "digital DNA" (Duncan and Stuart 2014)—creating a culture of innovation and collaboration that might foster the development of a new network-based organization. Likewise, HR should collaborate with the organization in designing a working environment that might enable productivity. HR could support the adoption and diffusion of new media communication tools that might promote engagement and motivation. Finally, HR might lead organizations in changing the way the HR function itself operate, moving toward a digital transformation, that is using digital tools and apps to make decisions, to solve problems and to innovate processes and practices.

To fulfil these aims HR are increasingly relying upon big data and analytics, as long as these tools grant several possibilities to increase efficiency and competitiveness, often reducing costs and investments (Lewis et al. 2013). Actually, together with people analytics, also the term 'big data' is becoming a keyword while debating about the transformation of the HR function (Davenport 2014). This label refers to the huge amount of structured, semistructured and unstructured data that has the potential to be mined for information. Big data are often characterized by 3Vs: the extreme *volume* of data, the wide *variety* of data types and the *velocity* at which the data must be processed.

Actually, the use of data-driven tools has showed many beneficial implications for organizations.

First of all they can now help to predict patterns of formal and informal communication, show real-time correlations between coaching and engagement, and even analyze employee patterns for time management driven by email and calendar data. Cognitive technology could also support recruiting practices as for instance it could be used to assess candidate honesty and personality through a dedicate software for video interview. Furthermore, people analytics and big data could be of help to analyze hourly labor and to identify patterns of overtime and/or of absenteeism that could be useful for a more aware management of the workforce.

Ultimately, there has been much debate about the use of big data and analystics in people management. Undoubtedly, they represent a challenge for HR but at the same it is evident the opportunity they grant to companies in terms of business and competitiveness increase (Davenport 2014).

However, it should be underlined that the value and effectiveness of big data depends on the human operators who process and interpret these data formulating the proper queries to direct big data projects. Some big data tools meet specialized niches and allow less technical users to make various predictions from everyday business data. In this vein, big data can be contrasted with small data, another evolving term that's often used to describe data whose volume and format can be easily used for a sort of self-service analytics, answering to a specific question.

3   Intelligent Automation: Challenges and Opportunities of Robotics for HRM

A concrete sign of the digital revolution depicted above is the increasing presence of intelligent automation within the organizational settings.

Intelligent automation is the combination of artificial intelligence—including natural language processing, machine learning, and machine vision—and automation, that allows to collect and synthesize vast amounts of information, automating entire processes or workflows, learning and adapting to different kind of situations and contexts. Applications range from the ordinary to extraordinary: from collecting, analyzing, and making decisions about textual information to guiding autonomous vehicles and advanced robots (Schatzky 2014).

IBM's Watson is a concrete example of intelligent automation. It a cognitive intelligence system that can collect and analyze massive amounts of textual information to answer quickly to complex inquiries. Watson can analyze 500 GB, equivalent to one million books, every second.

IBM planned Watson to allow machines to interact in natural language with humans across a wide range of applications and processes, understanding questions posed by humans and providing answers in a language that could be understood by them. Watson is being used in a wide range of contexts: from legal research, to telecommunications, to financial services, to political decisions and healthcare sector.

With reference to HRM, Watson also grants several possibilities to manage people efficiently.

A first option is called *Watson Personality Insights*. Using the Big Five approach to personality study, this application extracts personality characteristics studying how a person writes. From an organizational point of view, this affordance could be beneficial to recruit people whose personality traits are attuned with the organizational culture, to match individuals to other individuals, for instance to form efficient teams, or to customize organizational communication adopting personalized messaging and recommendations.

Another opportunity could be *Watson Recruitment,* an application that recommends best candidates for any job and contributes to improve recruiter efficiency, or *Watson Career Coach* that supports employees in planning and pursuing individual career paths, fixing goals and ambitions and self-assessing skills. Finally, there is also *Watson Talent Development*, an application that provides employees with tailored learning recommendations based on role, preferences, personality insights and career development plans.

In sum, what only a few ago could have seemed fiction is now a fact. Cognitive technology have completely redesigned HR solutions. Therefore, to succeed in this new paradigm, HR teams need to develop and improve a new set of specific professional IT skills. However, studies in the field have confirmed that although IT has greatly contributed to allow HR professionals to access and disseminate information more rapidly, it has also heavily influenced what organization expect from them (Gardner et al. 2003). Consequently, an important implication of this transformation is that the revolution brought about by IT in HRM is concretely changing the competence profile required to professionals operating in this field.

Nonetheless, some authors agree that "traditional" HR competencies have not completely disappeared, rather, in view of the current pressures imposed by a high-competitive market, professionals need to juxtapose some additional skills to them, in order to better cope with present business challenges (Baill 1999; Brockbank et al. 1999). In this vein, IT seems to grant professionals sophisticated tools to develop these new skills and thus to better fit them into the organizational demands. Accordingly, the shift from a focus on HR administration to a focus on a more strategic management of the organization has redefined the domains of HR competence, specifying the need to cover multiple activities and tasks: knowledge of the business, delivery of HR practices, change management and technology expertise (Schoonover 2003; Brockbank and Ulrich 2003; Bell et al. 2006).

The first domain labeled as "knowledge of business" is referred to the financial, strategic, and technological capabilities of an organization. HR professionals should know how to align HR strategies with business vision and the ability to consult with line management to analyze and solve problems (Kochanski and Ruse 1996; Svoboda and Schröder 2001; Ulrich et al. 2008). They should understand how their business creates profit and they must be able to view issues from the perspective of customers (Yeung et al. 1996).

The second domain—delivery of HR practice—is referred to the specific knowledge and ability in planning and realizing innovative HR practices (Ulrich et al. 2008). HR professionals should be competent in areas such as staffing, development, compensation, and employee and labor relations. However, competence in this area goes beyond knowledge; it requires HR professionals to be able to communicate and vehiculate HR practices to organizational members.

The third domain is connected with change management skills. HR professionals should be able to understand, plan and manage change, they should be able to be change agents helping organizational members to make sense of it. Finally, HR professionals should be capable of using technology to collect data and transform data into strategically valuable information (Lawler and Mohrman 2003). In this vein, if properly exploited, technology could be an ally to support and evelute their function.

However, if in theory, information technology could facilitate the role of HR as business partner by simplifying the gathering of strategic data, the relationship between HR and organizational outcomes with reference to IT should not be taken for granted (Roehling et al. 2005).

Besides the undebatable opportunities granted by technology to HR function, several challenges make the HR scenario more complex with respect to the past. With the advent of cognitive technology, HR professionals are called to rethink their skills and at the same time to manage more complex organizational demands, that often go even behind their technical skills (e.g. changing mental models, creating and sustaining organizational culture, facilitating collaboration, etc.). And sometimes organizations risk to forget that even HR professionals are human resources. Therefore, a better understanding of the impact that technology has on HR professionals' attitudes toward their jobs and profession is need as long as it could help in designing better informational technology for future use in HR activities.

4   Organizational Network Analysis: When Cognitive Technology Helps HR to See "Beyond the Chart"

In the previous sections, challenges and opportunities of cognitive technology have been debated.

One of the most innovative function granted by analytics to HRM is Organizational Network Analysis.

Organizational Network Analysis (ONA) is a structured way to visualize how communications, information, and decisions flow through an organization. Organizational networks consist of nodes and ties, the foundation for understanding how information in organizations is flowing, can flow, and should flow (Kim et al. 2012).

The basic assumption grounding ONA is that every organization is made up of people ("nodes") who serve as critical paths for exchange of ideas and information. Therefore, a connection delivers value when precious and functional information is exchanged (Wasserman and Faust 1994).

According to ONA four are the possible configurations that people might have within an organizational setting.

- Central node: These are the people who seem to know everyone. Central nodes share lots of information and influence groups quickly. Central nodes can be anywhere in the hierarchy of an organization, are often well liked, and are highly engaged in company news and developments.
- Knowledge broker: These people create bridges between groups. Without knowledge brokers, information and idea sharing risks to stop.
- Peripheral: Easily overlooked and unconnected to the rest of the company, high-potential peripherals can be a risk to organizations as they generally tend to think that their talents are not appreciated within the organization and they take them elsewhere.
- Ties: Ties are the formal and informal relationships between nodes. Establishing optimal relational ties between central nodes and knowledge brokers helps ensure useful information moves easily between and within groups

These nodes and ties are the core elements of ONA. Visualizing the relationships between nodes and ties makes it much easier to identify critical connections and potential barriers to information flow and collaboration. ONA reveals where central nodes could have the most impact—in groups that "don't talk much," for example—or where you should build stronger connections to streamline information sharing and eliminate redundancy.

By revealing and analysing the "true" relational configuration of the organization, ONA helps emphasising the role played by informal networks, that often could account for the way work happens in an organization more and better than the formal positions established by the formal structure. By this, through the assessment of the informal networks, organizations could better define roles, could use talent more efficiently, and could implement functional clarity. Further, identifying people that are highly central in networks can help managers to consider how to redistribute informational resources, how to manage

individual power with respect to group engagement and how to motivate workers to steer expertise toward organizational effectiveness.

This evidence and thus the beneficial effect of ONA is much more important in critical situations, such as those experienced following to downsizing and restructuring processes, where it is increasingly important to get people connected and to lead them sharing the organizational goals. Therefore, to have a clear map of the formal and informal relationships, of the existence of groups and subgroups, namely even of different often competing cultural view of the organizational project, could be a strategic tool for an efficient HRM (Cross et al. 2002; Borgatti and Li 2009; Borgatti et al. 2009).

More in detail, ONA could contribute to highlight the leadership style featuring the networks and its relationship with formal authority, the physical dispersion and virtual work, the existence of dense subgroups and their connections to other sub-groups and the workflow processes or job descriptions that overload specific roles and could slow the group.

In the end, by "making visible otherwise invisible patterns of interaction" (Cross et al. 2002), ONA adopts a people-based, soft and relational perspective of the organization which could be very useful to managers and executives to understand how things really work beyond the formal structure. Actually, as argued earlier, almost each hard organizational processes, from task assignment, to role definition, to job description, are influenced by social relationships. Furthermore, the network of relationships highly influences capital decision making and leadership practices. In this vein, organizational network analysis could provide organizations and specifically HRM with insight and information previously unavailable that could support a more aware management of the human capital. Accordingly, it can be used to identify and select more productive employees, to improve training and development programs, to facilitate knowledge-management programs and to identify key employees to guide compensation and pay decisions (Hollenbeck and Jamieson 2015).

In view of these evidences, ONA could be considered a very strategic tool of people analyitics that together with the other solutions drawn above could usefully contribute to renew the role of the human resource function in the organization.

5   Conclusion

The digitalization that has invested the labor market has undoubtedly changed the way organizations manage their human resources. The opportunities granted by cognitive technologies in terms of rapidity and accuracy in the analysis of employees cannot be compared with the most traditional practices of people management. In view of this, according to a rather pessimistic perspective, the HR function will be soon substituted by most reliable and objective tools provided by technologies.

However, this chapter has attempted to argue that although the intrinsic beneficial features of cognitive technologies, HRM would maintain its primacy as a strategic practice for organizations, if it would be able to keep its competencies updated with these developments. In this vein, technologies could be a precious partner for recruiting, for assessing and for training human resources, given that executives and professionals would be able to use them adequately as a support to their needs and not as an alternative solution to their role within the organization.

Accordingly, the strategic role of HR as main component of the chart has to do with its ability to intercept the human dimension of the organization, to keep in contact with workers, to find tools to fulfil their personal and social needs and to enhance their motivations. In this vein, HR could never loose its role as long as work would continue to be meaningful in life experience. Furthermore, the affordances provided by cognitive technologies not simply in terms of rapidity and accuracy of the analytics about people rather in terms of potential customization of the output—namely with special reference to the organizational culture that frames individual and organizational actions—seem to better interpret a people-based approach to organizational management. Consequently, technologies could help HR managers to monitor how employees perceive and experience their job and consequently plan actions and practices that could be better attuned with these data. This interaction between men—the HR specialists—and machines—cognitive technologies—would further show that technology alone could not complete the job of managing people, though it could make it easier.

Organizations need a critical competence in managing the data produced by technology and consequently in planning efficient interventions. This could be the renewed role of HR: a gatekeeper of the human processes that animate the organization.

Therefore, this reading of the opportunities given by technology could be the key to concile the sign of the times—a change in HRM and the unavoidable progress of technology in this domain—with the need to preserve a strategic organizational function that could be more important if it succeeds in emphasing its critical role that marks the difference with machines.

References

Baill, B. (1999). The changing requirements of the HR professional—Implications for the development of HR professionals. *Human Resource Management, 38*(2), 171–175.

Bell, B., Lee, S., & Yeung, S. (2006). The impact of eHR on professional competence in HRM: Implications for the development of HR professionals. *Human Resource Management, 45*(3), 295–308.

Bersin, J., McDowell, T., Rahnema, A., & van Durme, Y., (2017). The organization of the future: Arriving now. In *Global human capital trends 2017: Rewriting the rules for the digital age* (pp. 19–28). Deloitte University Press, Available at https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends.html.

Bondarouk, T., & Ruel, H. (2009). Electronic human resource management: Challenges in the digital era. *The International Journal of Human Resource Management, 20*(3), 505–514.

Borgatti, S. P., & Li, X. (2009). On social network analysis in a supply chain context. *Journal of Supply Chain Management, 45*(2), 5–22.

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science, 323*(13), 892–896.

Brockbank, W., & Ulrich, D. (2003). *Competencies for the new HR*. Alexandria, VA: Society for Human Resource Management.

Brockbank, W., Ulrich, D., & Beatty, R. W. (1999). HR professional development: Creating the future creators at the University of Michigan Business School. *Human Resource Management, 38,* 111–118.

Caudron, S. (2003). HR is dead. *Long live HR. Workforce, 82*(1), 26–31.

Collins, L., Fineman, D., Tsuchida, A., (2017). People analytics: Recalculating the route. In *Global human capital trends 2017: Rewriting the rules for the digital age* (pp. 97–106). Deloitte University Press, Available at https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2017/people-analytics-in-hr.html.

Cross, R., & Borgatti, S. (2002). Making invisible work visible: Using social network analysis to support strategic collaboration. *California Management Review, 44*(2), 25–46.

Davenport, T., (2014). *Stop using the term "big data"*. Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/topics/analytics/big-data-buzzword.html.

Drucker, P. (1954). *The Practice of Management*. New York: Harper and Row.

Duncan, G & Stuart, S., (2014). *Building your digital DNA*. Lessons from digital leaders. Deloitte University Press. Available at https://www2.deloitte.com/bh/en/pages/technology/articles/building-your-digital-dna.html.

Fletcher, P. (2005). From Personnel Administration to business-driven Human Capital Management. The transformation of the role of HR in the digital age. In H. Guetal & D. Stone (Eds.). *The brave new world of E-HR. Human Resource Management in the Digital Age* (pp. 1–21). San Francisco: John Wiley and Sons.

Gardner, S., Lepak, D., & Bartol, K. (2003). Virtual HR: The impact of information technology on the human resource professional. *Journal of Vocational Behavior, 3*(2003), 159–179.

Guszcza, J., Lewis, H., Evans-Greenwood, P. (2017). Cognitive collaboration. *Why humans and computers think better together*. Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/deloittereview/issue20/augmentedintelligencehumancomputer-collaboration.html.

Hammonds, K. H. (2005). Why we hate HR. *Fast Company, 97,* 40–47.

Hollenbeck., J., & Jamieson, B., (2015). Human capital, social capital and social network analysis: Implications for strategic human resource management, *Academy of Management Perspectives, 29(3)*, 370–385.

Kim, T., McFee, E., Olguin Olguin, D., Waber, B., & Pentland, A. S. (2012). Sociometric badges: Using sensor technology to capture new forms of collaboration. *Journal of Organizational Behavior, 33*(3), 412–427.

Kochanski, J., & Ruse, D. (1996). Designing a competency-based human resources organization. *Human Resource Management, 35,* 19–33.

Lawler, E., & Mohrman, S. (2003). *Creating a strategic human resources organization: An assessment of trends and new directions*. Palo Alto: Stanford University Press.

Lawler, E., Boudreau, J., & Mohrman, S. (2006). *Achieving strategic excellence: An assessment of human resource organizations*. Stanford, CA: Stanford University Press.

Lewis, H., Guszccza, J., & Lucker, J., (2013). Big data 2.0 New business strategies from big data. Deloitte University Press. Available at https://dupress.deloitte.com/dupusen/deloittereview/issue12/big-data-2-0.html.

Manuti, A., & de Palma, P. D. (2016). *The social organization*. London: Palgrave MacMillan.

Roehling, M., Boswell, W., Caligiuri, P., Feldman, D., Graham, M., Guthrie, J., et al. (2005). The future of HR Management: Research needs and directions. *Human Resource Management, 44*(2), 207–216.

Rothwell, W., Prescott, R., & Taylor, M. (2008). *Human resource transformation: Demonstrating strategic leadership in the face of future trends*. Palo Alto, CA: Davies-Black Publishing.

Schatsky, D., (2014). *Intelligent automation: A new era of innovation*. Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/focus/signals-for-strategists/intelligent automation-a-new-era-of-innovation.html.

Schein, E. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey Bass.

Schoonover, S. C. (2003). *Human resource competencies for the new century*. Falmouth, MA: Schoonover Associates.

Stephen, M., Uzawa, S., Volini, E., Walsh, B., & Yoshida, R. (2016). *Digital HR Revolution, not evolution.* Deloitte University Press. Available at https://dupress.deloitte.com/dup-us en/focus/human-capital-trends/2016/digital-hr-technology-for-hr-teams-services.html.

Svoboda, M., & Schröder, S. (2001). Transforming human resources in the new economy: Developing the next generation of global HR managers at Deutsche Bank AG. *Human Resource Management, 40,* 261–273.

Ulrich, D., Brockbank, W., Johnson, D., Sandholtz, K., & Younger, J. (2008). *HR competencies: Mastery at the intersection of people and business*. Alexandria, VA: Society for Human Research Management.

Volini, E., Occean, P., Stephan, M., & Walsh, B. (2017). Digital HR: Platforms, people, and work. *Global Human Capital Trends 2017: Rewriting the Rules for the Digital Age* (pp. 87–93). Deloitte University Press, Available at: https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2017/digitaltransformationin-hr.html.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. New York: Cambridge University Press.

Yeung, A., Woolcock, P., & Sullivan, J. (1996). Identifying and developing HR competencies for the future: Keys to sustaining the transformation of HR functions. *Human Resource Planning, 19,* 48–58.

4

Social Networks as Strategic Ally of HRM Practices in the Cognitive Technology Era

Abstract This chapter considers the resources granted by new communicative technologies (e.g. social networks) as an opportunity to manage people, exploiting the affordances granted by cognitive intelligence. The authors argue that, if properly adopted, cognitive intelligence could support the function of HRM to rethink its practices and to make them more attuned with the contemporary needs of people and organizations, thus allowing the transition to the Enterprise social media. The People Perfomance Plan, as a platform devoted to organizational management, is presented as an example of the possible connections between traditional and new technology-driven people management tools.

Keywords Social collaboration · Enterprise social media · Affordances Digital workplace

1   Introduction

The developments of cognitive technology as well as the capillar diffusion of social media in leisure and work have completely redefined the way people relate to each other and the way organizations make business as well (Qualman 2010; Manuti and de Palma 2016).

More in detail, social networks are tools aimed at developing online communities of people who share interests and/or activities, or who are interested in exploring the interests and activities of others. Examples of very popular social networking sites are Facebook, MySpace, Twitter, and LinkedIn. These sites generally provide a number of ways for users to interact and communicate with each other including instant messaging, chat rooms, email, webcams, file sharing, blogging and discussion groups (Coyle and Vaughn 2008).

With specific reference to the working life, a growing body of research is testifying the crucial role played by social networks in the workplace in enhancing communication practices, teamwork and productivity (Nardi et al. 2002). Before the advent of social networking, maintaining a professional network was extremely labour intensive. Much effort was put into the creation and maintenance of professional networks, crucial both to individuals to measure their compentencies with a very turbulent and flexible market and to organizations to increase and maintain organizational competitiveness (Lange et al. 2008). Currently, social networking provides tools that create, maintain and activate personal and organizational social networks with little effort and much more efficiency. From an organizational point of view, by adopting social networking technologies companies could communicate with stakeholders inside and outside the organizational boundaries: they could be effective in creating and vehiculating their culture, in managing change, in stimulaing collaboration, in increasing motivation, in empowering expertise and in sharing and building knowledge (Fraser and Dutta 2008; Bernoff and Li 2008).

Moving from these assumptions, the chapter attempts at discussing how social networks could be seen as an opportunity to effectively manage people in organizations. In this vein, being expression of the

cognitive intelligence described in the previsous sections, social networks could contribute to empower the function of HR and make it more attuned with the needs of people and organizations at the brink of the cultural revolution described above.

To better argue this proposal, the chapter introduces the People Perfomance Plan 3.0, a platform devoted to organizational management, that could be took as an example of the possible connections between traditional and new technology-driven people management tools.

2   Enterprise Social Media: Social Collaboration at Work

The term collaboration is one of the most recurrently used in the scientific literature as well as in the professional practice while discussing about organizational effectiveness. According to a recent authoritative review of the literature collaboration could be described as "an evolving process whereby two or more social entities actively and reciprocally engage in joint activities aimed at achieving at least one shared goal" (Bedwell et al. 2012, p. 3).

The social media explosion has further emphasized the relevance of collaboration for organizational success, calling for a redefinition of organizations and consequently of their grounding processes, first of all of collaboration.

According to some recent studies, the diffusion and use of cognitive technologies within organizational contexts have contributed to the birth of the so-called Enterprise 2.0, featured by an extended use of technology mainly addressed to four main working processes: communication, collaboration, cooperation and connection (Cook 2008). In fact, technology provides different typologies of platforms that could serve both functional and social needs of people at work.

Through these platforms, people are allowed to converse with others, either by text, image, voice or video—or a combination of these. Examples include discussion forums, blogs, instant messaging, social

presence and virtual worlds. People may share contents in structured and unstructured ways through text and video sharing, social cataloguing and bookmarking. People can collaborate with each other on particular problems, directly and indirectly in both central and distributed ways, for example through wikis. Finally, people can make connections with and between both content and other people.

Accordingly, because social networking is the most prevalent example of a connecting technology, organizations have tried to exploit its advantages to develop *enterprise social media platforms* namely "Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing" (Leonardi et al. 2013, p. 2).

Enterprise social media have proved to be beneficial for organizations at least for two main affordances that make them distinct from other communication technologies commonly used in organizations: they provide visibility to the communicative actions of people who use them and at the same time the traces of those communicative actions persist over time (Treem and Leonardi 2012). In view of this, they provide multiple informations, texts, networks and expertise through which people can learn across the organization. Consequently, one of the most important outcomes of social media in organizations is the opportunity to increase social learning and therefore to aim to a better performance. Yet, the persistence and visibility of texts produced by others make available information even to those who are not directly involved in the original communication, giving them the opportunity to learn from the others and even to contribute to that learning integrating contents.

Furthermore, social media mobilize two very precious typologies of knowledge in organizations: instrumental knowledge and metaknowledge. Instrumental knowledge is knowledge that helps individuals to do something, to accomplish their tasks. Metaknowledge is knowledge about what and whom other people in the organization know. This type of knowledge is strictly connected with the enrichment of social capital

inside organization and is also a very relevant antecedent to the transfer of instrumental knowledge and of the development of expertise.

Accordingly, a positive consideration of social media use in organizations allows to see enterprises through three different very eloquent metaphors: leaky pipes, echo chambers and social lubricant (Leonardi et al. 2013). Organizations are leaky pipes if they allow to vehiculate and share knowledge increasing social capital. Organizations are echo chambers because they contribute to connect like-minded people avoiding conflicts. Finally, organizations are also social lubricant because they ease connection and communication to get work done more quickly.

By underlining such beneficial effects, cognitive technologies and social media in particular are becoming an important dimension of HRM especially with reference to issues such as organizational communication, knowledge sharing and management, and employees' abilities to form relationships and build social capital.

Likewise, given the undebated relevance of collaboration within the workplace, the advent and diffusion of social media in organizations have shed light on the need to improve "social collaboration", by exploiting the affordances given by new media.

As showed earlier, collaboration is a process that engages people in working together to solve a problem or to achieve a goal. Therefore, the virtual space constructed and made available to workers by social media seems to be the 'natural' environment for the development of collaboration processes. Yet, the dissemination of information and the constant exchange of knowledge granted by these networks help multiple people or groups in interacting, in sharing and producing competencies to achieve common goals. The output of such processes is what is generally referred to as 'social collaboration'.

Research shows that sharing concepts on a digital collaboration environment often facilitates a "brainstorming" process, where new ideas may emerge due to the varied contributions of individuals, often belonging to different cultures and different age groups (Cross and Parker 2004). Yet, if it is true according to some scholars that thanks to the development of social media 'ideas are everywhere' (Fowles and Clark 2005), with special reference to innovation and creativity, crucial outputs of collaboration, social media pose a big challenge to

organizations. Their use could be potentially a threat for intellectual property as long as ideas are vehiculated without restrictions in the web and consequently could be used by anyone. However, at the same time this boundaryless process of sharing allows individuals to debate their ideas with a potentially unlimited audience thus having the possibility to develop their expertise in the field.

A further subtle but relevant distinction that needs to be made is the one between social collaboration and social networking. The latter is individual-centric, while social collaboration is entirely group-centric. In other words, people use social networking to pursue individual goals while social collaboration tools are useful to reach collective goals. In this vein, social networking means socializing for personal, professional or entertainment purposes, for example, through networks like LinkedIn and Facebook. Social collaboration, on the other hand, means working with others to achieve a common goal, for example, through applictions as GitHub and Quora. Therefore, if social networking generally focus on individuals sharing messages in a more-or-less undirected way and receiving messages from many sources into a single personalized activity feed, social collaboration, on the other hand, focus on the identification of groups and collaboration spaces in which messages are explicitly directed at the group and the group activity feed is seen the same way by everyone. However, if properly directed to a common goal, even the use of social networking tools could strenghten social collaboration thus supporting the transformation of groups into communities of practice (Gunawardena et al. 2009). Accordingly, social collaboration may refer to time-bound collaborations with an explicit goal to be completed or to perpetual collaborations in which the goal is simply knowledge sharing, and this is the case for communities of practice.

From a human resource management perspective, social collaboration could be a useful tool for organizations to enhance productivity. 'Social' workers could be able to use social collaboration tools to manage personal tasks, professional projects and social networks with other colleagues within the same organization. In this vein, social collaboration could be exploited as a platform to get people involved and connected everywhere and at anytime and to build strong relationships among colleagues, which in turn leads to faster problem solving (Jue et al. 2010).

3   Social Collaboration Platforms: How the Workplace Turns Digital

Basing on the assumptions drawn above, a growing number of organizations is chosing to use social collaboration platforms to increase efficiency and to manage human resources as well.

Pragamtically speaking, a social collaboration platform is a category of business software that adds broad social networking capabilities to work processes. The goal of a collaboration software application is to foster innovation by incorporating knowledge management into business processes so employees can share information and solve business problems more efficiently. From a structural point of view, collaboration platforms are easily accessible and easy to use, they are built for integration and to support team collaboration, through specific functions such as issue tracking and messaging. Many collaboration platforms are designed to look like Facebook or other sites that employees are already accustomed to using in their personal lives.

Besides these common general features, there is a wide range of collaboration platforms on the market, each designed for a specific demand.

For instance, there are very simple social collaboration applications designed just to communicate, to interact and to share information at a basic level. In this case, social networking tools could be used to enhance the formal and informal dimensions of organizational socialization. Further, there are more complex social collaboration tools useful for perfomance and people management. In this case, organizations using these applications consider social networks as a privileged context where people show their skills and abilities, where they share norms and values, where they learn and transfer knowledge. By this, through social networks organizations could "study" their human resources, could learn how to better motivate them and thus how to manage them more efficiently.

Certainly, there are no one-size-fits-all choices. Each platform mirrows the specific needs of the organziational context. Therefore, the choice should be anticipated by an accurate consideration of the corporate vision and mission, in a word by the investigation of the specific cultural model that has inspired its birth and animates its existence.

Concrete examples of the most popular social collaboration platforms are: IBM Connections, Yammer, Socialcast. These tools are all business social networks addressed to improve knowledge sharing, decision-making and innovation. Through different kind of components such as wikis, forums, social analytics, communities and micro-blogs, they allow a strategic management and promotion of internal communication processes and support an efficient team building.

A different option is the one granted by Saba. This is an Intelligent Talent Management application that offers proactive, personalized recommendations on candidates, connections and contents. Its products help organizations in managing their most important and strategic activities such as recruiting, learning, performance, compensation, succession and planning by using social networking.

Inspired by those models, more recently, Das HumanKapital, an Italian start up, has developed People Performance Plan (PPP3.0). This worker-oriented social platform has been designed to support people management and human capital enhancement. Its main aim is to make organizational practices more "social" and to increase organizational identification. Thanks to adavanced analytics, its applications allow organizations to intutively manage their human capital making workers more aware about the organizational processes. HR digitalization and thus the adoption of these specific tools is not only beneficial to organizations that could manage more efficiently, capitalizing the value associated with their human resources. HR digitalization engenders also meta-communicative effects since indviduals experiencing these worker-centred practices are led to think that their organization greatly values their contribution therefore they would more probably experience higher levels of organizational commitment and engagement. Therefore this is an indirect even though very powerful effect of the interdipendence between person and organization which is further amplified by the diffusion of social neworking.

Moving from these evidences, PPP3.0 aims at setting up a digital workplace. In detail, it provides a wide range of applications aimed at fulfilling the composite demands of those organizations who wish to turn digital their human resource management practices.

More specifically, PPP3.0 could be a precious support for organizations wishing to improve and monitor internal communication. To this purpose, applications like "People Action" or "People Plan" are virtual billboards that allow workers to keep informed about their company and at the same time to share information. Through the "Profile" section workers could make their skills and ambitions visible to all members so that in case of internal mobility they can have advantages in the assessment process. Likewise, "Web 2.0" enables workers to keep updated with the organizational life by connecting with its social profiles (mainly through Facebook and Twitter).

Other crucial sections are "Team work" and "Pad". Through these virtual tools workers have the possibility to improve social collaboration by sharing projects, best practices and skills and by concretely working together on the same file thus producing a "plural" performance. This possibility is also granted by the applications labeled "Conference 2.0" and "Chat" that enable workers to meet virtually in a web space to discuss about projects and/or simply to exchange ideas and to communicate simultaneously both inside one's team and with other colleagues working in another team, whose skills could be precious to finalize the performance.

Employees could also profit from the "Repository" section that collects and organizes data in three different subsections "general", "group" and "private" thus giving workers the opportunity to access information functional to their composite needs. The area "Future projects" is a virtual box for the suggestions coming from employees and referred to some concrete changes that might improve performance as well. It could be thought as another informal tool for internal communication since it links the management with the bottom line and when appropriately managed it could also contribute to increase enagement and motivation.

Furthermore, PPP3.0 provides specific tools to support the main processes of people management. "Training 2.0" is the section that could be used by professionals, trainers, and leaders to transfer notions, best practices and skills to workers. "Ranking" could be used to rank workers with respect to their participation in the network (e.g. through an evaluation of quality and quantity of posts and feedbacks), to their

legitimized expertise and to their performance. In line with this, the section "perfomance" allows to use these data to develop compensation and benefit programs. This function is further supported by "Big data analytics" a section that rapidly enables the access to fundamental statistics useful to develop career paths and development programs.

Finally, the sections "Recruiting" and "Evaluation" have been thought to support HR managers in choosing and recruiting talents whose skills are precious for the organization and in developing 360° feedback programs useful to assess individual and team efficiency and performance.

Very interesting is the section "gatekeeper" that provides information and people analytics useful to point out the informal leader, namely the worker and/or the group of people who sets trends, controls communicational streams and has the informal power to motivate colleagues.

In the end, PPP3.0 provides workers with a space to enjoy more factual services such as "Car sharing" and "Sharing work". The first is a section that connects people living in the same place and having the need to find a lift to work and/or to home. This is a useful option not only in practical terms but also because of its "social" implications. To travel together is one of the simplest and cheapest way to socialize, to know each other better and to share the organizational culture as well. The second one—"Sharing work"—allows workers to give and receive credits from colleagues attesting the hours worked in the platform. This option could be a measure of active participation that similarly to others could also account for the more informal relational configuration of teams, thus giving information to managers about the distribution of roles and responsibilities inside the group.

4   Conclusion

The digitalization of the HR function has inevitably led to a redefinition of the most traditional practices of people management. Contrary to a socially diffused simplified representation, social networks have been proved to be much more than simply tools to fulfil relational needs. Rather, the composite affordances they provide to organizations concretely contribute to develop a digital workplace, acting

simultaneously on the main strategic management processes: recruiting, assessing performance, training and planning the distribution of benefits and compensation.

In this vein, when properly considered within a wider deveopment plan, social networks could be really an indispensable ally of the HR function, supporting its practices and making them more rapid and efficient.

Therefore, the challenge for the future is not to use or not to use these tools to manage people but to learn how to exploit their potentialities, given a solid "human-based" (namely guided by enlightened executives and managers) development plan for the organization. Yet, to define a stout cultural orientation is probably the only thing that machines cannot do for organizations.

The information provided by big data and people analytics, the output given by organizational network analysis are useless if they are not guided by a sound and shared organizational project. Paradoxically, this evidence shows that the advent of cognitive technology will change nothing with respect to the past. Those organizations that are not able to define a clear vision for the future and do not suceeed in communicating with their employees are destined to fail even though they adopt social networkings.

In a word, it is not the tool that is beneficial or detrimental, it is the way people decide to use it that might change everything. Therefore, organizations that decide to turn digital should first prepare themselves and their contexts to welcome this cultural revolution. Once framed within the organizational culture, it will not change "the way we do things around here". Rather it will simply make it better.

References

Bedwell, W., Wildman, J., Diaz-Granados, D., Salazar, M., Kramer, W., & Salas, E. (2012). Collaboration at work: An integrative multilevel conceptualization. *Human Resource Management Review, 22*(2), 128–145.
Bernoff, B., & Li, C. (2008). Harnessing the power of the oh-so-social web. *MIT Sloan Management Review, 49*(3), 36–42.

Cook, N. (2008). *Enterprise 2.0. How social software will change the future of work*. Hampshire: Gower Publishing.

Coyle, C., & Vaughn, H. (2008). Social networking: Communication revolution or evolution? *Bell Labs Technical Journal*, *13*(2), 13–17.

Cross, R., & Parker, A. (2004). *The hidden power of Social Networks*: *Understanding how work gets done inorganizations*. Boston: Harvard Business School Press.

Fowles, S., & Clark, W. (2005). Innovation networks: Good ideas from everywhere in the world. *Strategy & Leadership, 33*(4), 46–50.

Fraser, M., & Dutta, S. (2008). *Throwing sheep in the boardroom. How online social networking will transform your life, work and world.* Chichester: Wiley.

Gunawardena, C., Hermans, M., Sanchez, D., Richmond, C., Bohley, M., & Tuttle, R. (2009). A theoretical framework for building online communities of practice with social networking tools. *Educational Media International, 46*(1), 3–16.

Jue, A., Marr, J., & Kassotakis, J. (2010). *Social media at work. How networking tools propel organizational performance*. San Francisco: Jossey-Bass.

Lange, A., Mitchell, S., Stewart-Weeks, M. & Vila, J. (2008). *The connected republic and the power of social networks*. The Cisco Internet Business Solutions Group. Available at www.cisco.com/go/ibsg.

Leonardi, P., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication, 19,* 1–19.

Manuti, A., & de Palma, P. D. (2016). *The social organization*. London: Palgrave MacMillan.

Nardi, B., Whittaker, S., & Schwarz, H. (2002). NetWorks and their activity in intensional networks. *Computer Supported Cooperative Work, 11,* 205–242.

Qualman, E. (2010). *Socialnomics: How social media transforms the way we live and do business*. Hoboken, NJ: Wiley.

Treem, J. W., & Leonardi, P. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Communication Yearbook, 36,* 143–189.

5

How to Develop Digital HRM Practices in the Cognitive Technology Era: Evidences from a Case Study

Abstract In light with the results coming from a case study, the chapter aims to show how a social platform dedicated to HRM could be beneficial both for individuals and for organizations. The first could explore new communicative channels in and with the organization, thus gaining a sense of agency and responsibility that inevitably have impact on their performance. The second could exploit social networks to develop and to convey a shared sense of corporate identity enhancing reputation and consequently commitment.

Keywords Social collaboration · Agency · Commitment · HRM Performance

1 Introduction

Basing on the acknowedgement of the radical transformation that cognitive technologies have operated in the working context and sharing the people-based approach to HRM, the chapter aims to show how cognitive technologies, far from being simply considered a tool to

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marginalize and/or subsititute workers could actually become a strategic ally to empower people at work and to create value within the organization, acting not only on perfomance but rather moving some of the most salient psycho-social drivers of organizational behavior. In this vein, if used in line with the organizational vision and mission, cognitive technologies could really contribute to redefine HRM practices helping managers in managing people and objectives.

Indeed, parallel to the automation of many tasks and procedures, organizations are currently experiencing that the "essentially human" parts of work are becoming *more* important to stay competitive on the market. Skills such as empathy, communication, persuasion, personal service, problem solving, and strategic decision making are more valuable than ever. Yet, the use of cognitive technology could help speeding up the accomplishment of some routine work and allow workers to focus on the human side of work (Knowles-Cutler and Lewis 2016).

However, this evidence is strictly connected with the ackowledgement that the challenges brought about by the digital age urge organizations to expand the vision of the workforce; think about jobs in the context of tasks that can be automated (or outsourced) and the new role of human skills; and focus even more heavily on the customer experience, employee experience, and employment value proposition for people. This evidence reinforces a critical challenge for business and HR leaders -namely, the need to design, source, and manage the future of work, workforces, and workplaces to incorporate a robust understanding of which skills are essentially human. Actually, HR leaders should focus on defining the difference between essential human *skills*, such as creative and ethical thinking, and nonessential *tasks,* which can be managed by machines. This requires reframing careers, and designing new ways of working and new ways of learning—both in organizations and as individuals.

In light with such reflections, the chapter discusses the explorative results coming from an Italian case study, showing how the development of a company social platform dedicated to HRM could be beneficial both for individuals and for organizations. The first could explore new communicative channels in and with the organization, thus gaining a sense of agency and responsibility that inevitably have impact on individual and organizational performance. The second could exploit

social networks to develop and to convey a shared sense of corporate identity enhancing reputation and consequently commitment.

2   Social Collaboration as a People-Based HRM Practice: From Theory to a Case Study

In the last several years, cognitive technologies have widepread within the organizational contexts. As showed, they have redefined contexts, tasks, careers and have opened a vivid discussion about the positive and negative implications of their use both for individuals and organizations.

However, cognitive technology is a complex label encompassing different forms of technologies (i.e. artificial intelligence, robotics, social media, etc.) that help people in managing several tasks and challenges more rapidly and more efficiently. The locution 'cognitive' is intended to stress the fact that technologies are able to perform tasks (e.g. recognizing handwriting or identifying faces, planning, reasoning from partial or uncertain information, and learning) that traditionally assume to require human intelligence (Schatsky et al. 2015).

Therefore, cognitive technologies could be an effective mean to fulfil performance and to manage strategic goals. Among these latter, one of the most relevant goal is people management, namely the whole of strategic organizational actions oriented to train, develop and motivate employees to perform their best. To this purpose, cognitive technologies could be designed and exploited to support collaboration and knowledge management, to strengthen commitment and to enhance communication (Schatsky et al. 2014).

In view of this, among cognitive technologies, as showed earlier, social media and social networking grant organizations to manage efficiently those objectives. Actually, by providing a series of functions and information (e.g. enterprise profile, micro blogging, blog, group, project management, product catalog sharing, document workspace, instant messaging) social media use in the organizational setting has been proved to increase communication and collaboration, thus acting positively also on performance (Cook 2008).

Moving from this evidence, the case study presented has aimed to develop a social platform to sustain the HR management practice of an Italian multinational company.

The project, that was conceived as an action research intervention (Lewin 1946; Argyris et al. 1985), has required several months and has articulated into different steps.

The first step has been devoted to the analysis of the context. Adopting an ethnometodological perspective, the context, the artifacts, the processes, the people have been observed in order to point out the organizational culture. More concretely, special attention has been devoted to the espoused values, to the formal philosophy, to the basic assumptions and shared meanings, to the "rules of the game" that concretely guide individual and organizational action, making it unique and distinctive (Schein 2004).

The second step has been dedicated to the definition of the research objectives and to their negotiation with the management. The needs manifested by company have been: the increase of the quali-quantitative level of communication, the development of means useful to improve collaboration and knowledge management among employees, the experimentation of new leadership models as a response to the challenges of change management. Indirectly the company aimed at redefining the brand through a new social identity, at introducing smart working modalities and at increasing its performance.

Therefore, the third step has been the development and the concrete testing of the platform for social collaboration in the context of Exprivia, an Italian ICT multinational company employing more than 2000 people in Italy and abroad. The company has its operative bases in Molfetta (Bari), Milano, Roma, Piacenza, Trento, Vicenza, Genova, Madrid, Barcellona, Las Palmas, Mexico City, Guatemala City, Lima, New York, Hong Kong and Shanghai. The core business is the design and development of software innovative technologies and the provision of services for the financial, healthcare, industrial, telecommunication and public administration national and international market.

The platform has been labeled People Performance Plan 3.0 (PPP3.0) and is propriety of the company Das HumanKapital s.r.l. (DHK).

The launch of the experimental phase has involved different stakeholders inside and outside the organization. Actually, following the good theoretical and methodological practices about change management (Weick and Quinn 1999), the introduction of the platform was conceived as a potential threatening factor for most employees, that might have led to direct and indirect resistance coping strategies (Oreg 2003). Therefore, change agents have been nominated. They are fundamental for their strategic ability to make sense of chance dynamics and to put them as credible and acceptable for the rest of the workforce (Weick 1995). Within the present project, change agents have been a Steering Committee, a Project Manager, the managers responsible for HR and ICT divisions, Carucci & Chiurazzi (an Italian communication company) and Das HumanKapital, the start up that has provided the PPP3.0 platform.

The steering commitee has contributed to guarantee commitment and participation to the project, thus sharing the changes and solutions proposed by the Project Manager and by the other stakeholders involved. The Project Manager has planned and coordinated all actions, keeping a constant communication flux with all the stakeholders. The HR manager has collaborated with the project manager to the development and analysis of the most strategic parts of the PPP3.0, those related with the empowerment of the workforce. The ICT manager has followed security and privacy issues. The Carucci & Chiurazzi has developed and carried out the editing of the platform. Das HumanKapital has developed, supported, coordinated and collaborated to the whole development of the project. It has provided the PPP3.0 platform and made all the adjustments useful to reach the projects objectives.

3   Inside Social Collaboration: The PPP3.0 Platform

As introduced in the previous chapter, PPP3.0 is a digital workplace promoting an innovative worker-oriented management of human resources. Yet, by providing a wide range of applications, the platform

supports organizations in adopting a "bottom up" management culture. In fact, each application could be strategically used and managed to answer to specific organizational demands. Therefore, it is the strategic top management who decides contents and consequently sets the objectives in line with the organizational goals, the latter being different for each context and even for the same context experiencing different stages of its life.

Given this evidence, with respect to the case study analysed, the definition of the contents of the platform has been one of the core action of the project.

This definition has followed specific rules in order to fulfil the objectives negotiated with the stakeholders: the content should be not too self-promotional, it should be relevant for the users, namely it should fill a gap they perceive they have in information, it should be accurate and well described; it should be coherent with the business/relation goals; il should be 'solid', that is it should be conveyed through a credible testimonial. Although it might seem banal and easy, the step of content definition is crucial since it leads to the definition of the platform's social policy and therefore to the potential success of the project.

Parallel to this action, to better fulfil the aims of the project a group of ambassador has been chosen, coherently they have been chosen adopting a 'bottom-up' approach, that is they were nominated by the colleagues. However, to concretely become ambassador employees should have satisfied the following features: representativeness for each business unit, social acknownoledgement as a 'social' person on behalf of colleagues, geographical representativeness, contractual representativensess, role representativeness. After the first 3 months of experimentation some other workers join the ambassadors adopting the 'member get member' technique since the whole workforce is involved.

Along with the contents, during this phase the HR manager together with the project manager and with the people from DasHumanKapital have set the number, typology and frequency of occurrence of the indicators that should be collected in the platform in order to assess the potential change and development with respect to social collaboration.

Accordingly, social collaboration as a psychosocial construct has been operazionalised into different dimensions, each measured by different types of indicators, quantitative and qualitative as well.

The dimensions pointed out for the quantitative indicators have been: *participation* measured through the amount of active users with respect to the total of ambassadors, *interaction*, measured through the amount of post published with a feedback and *commitment* to the project measured through the absolute amount of active users with respect to the total of people involved.

The qualitative indicators of social collaboration refer mostly to the sphere of HR soft processes. The dimensions investigated are the same as with the quantitative indicators (participation, interaction and commitment). However in this case the nature of the indicators is different. For instance, a qualitative indicator has been the definition of the 'network knot', that is of the people who are able to generate new relationships. Further, through the use of an algorhythm it has been possible to analyse the Top Social namely those individuals who have posted and commented on the issue debated adopting a communicative style that is attuned with the company communicative style. Finally, through the analysis of some specific people analytics the analysis of the interactions within the platform has allowed to measure the engagement, that is the involvement and identification manifested by the employees with respect to specific initiatives, results, corporate communications contained within the platform.

A final output of the analysis of the interactions produced is the production of some deliverables, concretely testifying the intense participation and commitment of the employees on the platform:

- **WIKI** on particularly innovative issues, as for instance Digital Trasformation, Smart Working, Google, Cloud, Internet of Things;
- **FAQ** on different topic specifically referred to the needs of employees;
- **CONTEST** dedicated to the best problem solving proposal referred to one's job, that finally has got an award.

4   Social Collaboration in Practice: Results from the Experimentation

The analysis of the outputs described earlier allows to draw interesting considerations on the expertimentation.

Concretely speaking, the PPP3.0 is a digital platform that relies upon cognitive technology and data analytics. Therefore, it works through 15 simple algorhythms that can be divided into three categories. The first one refers to the actions brought about by the employees within the platform and by the reactions engendered by their colleagues (e.g. n. of posts, n. of replies to the posts, the viral nature of the posts, the quality of the posts, etc.). These actions are summed, combined and controlled by some specific parameters, producing a score that allows to enhance the users in terms of quality and quantity of participation.

The second category of algorhythms refers to the skills of the employees, both to the hard (knowledge and technical abilities) and soft ones (core interpersonal skills). Each user is allowed to describe him/her self through some skills (self-assessment) and at the same time he/she is assessed by the organization through more traditional processes (hetero-assessment). This set of skills is investigated by adopting some specific parameters: the score they receive from colleagues, the fit between the skills declared and testified and the content of the posts, the fit between skills, tasks in the concrete esecution of the job, the relationship between skills and viral contents. In the end, the digital platform allows to have a synthetic view of all the parameters describing the employees, their relationship with colleagues and their relationship with the management.

Finally, the last group of algorhythms is referred to the Key Performance Indicators (KPI), namely to those indicators that allow to measure the performance associated with a specific activity and/or with a process. More simply, the platform allows to control the achievement of some levels of operational goals and the success connected with such achievements, defined in terms of making progress toward strategic goals.

The results coming from the analysis of these three categories are consequently reassessed on a 10-point scale and further a new algorhythm is generated, determining the Gatekeeper index.

Therefore, by using the above-mentioned algorhythms, the platform allows for an organizational network analysis: it compares the interaction and participation processes and it investigates the relational maps that derive. It allows examining how users communicate, how do users legitimate each other in terms of technical and soft skills, how do they use the acknowledged expertise of colleagues to solve problems and how do they use this knowlegde and skills to achieve the key performance indicators. Consequently, the platform contributes to define who is the most reliable user with reference to specific objectives, tasks and skills. This output leads to point out two crucial phenomena: the functioning of Units as formally prescribed by the chart, their adherence to objectives, tasks and responsibilities and parallel to this the development of informal networks guided by informal leaders (the Gatekeeper) and animated by collaboration and a spontaneous acknowledgement of expertise, that often goes behind formal roles.

Finally, by observing these dynamics, the platform allows also to analyse the potential gaps of knowleged and skills that employees perceive with reference to their tasks and roles. This information is particularly important for managers and executives to define KPI and to plan training and development initiatives in real time and moving from a bottom-up more effective approach.

In the specific case study reported here, becuase of its specific organizational demands, Exprivia decided to exploit only the applications aimed to develop and enchance social collaboration. Therefore, a special attention has been devoted to investigate the occurrence and co-occurrence of actions, topics and networks of relationships.

The issues that have been most frequently discussed are: Digital Trasformation, Smart Working, Google, Cloud and certainly the Company. The post have been published between 06:00 a.m. and 02:00 p.m. with an increase from 09:00 a.m. to 5:00 p.m. The use of the platform during non working time has been also significant thus testifying a need to keep the contact with a working context that is perceived positively. In 86 days, 15 FAQ and 10 WIKI have been produced and "Contest Bug" has been launched. The WIKI being the result of a partecipative process.

Users have been categorized according to the different modalities through which tehy have approached the platform. The three typologies

of users' behavior observed are: *explorative*, typical of users who enter in the platform and wait some days before writing a post; *communicative*, typical of those who like to post frequently any kind of content and especially those related to the company; *collaborative*, typical of those who wish to share their knowledge.

To further stimulate the levels of engagement, a group of influencers has been created. Those are particularly active users who were asked to take care and animate thematic groups and dedicated pluridisciplianary sections in order to create new connections and foster knowledge sharing. This operation was motivated by a redundancy of posts registred between users and project teams and thus to stimulate horizontatal involvement.

Finally, to collect a feed back on the experimentation a questionaire was administred to all users, investigating if and to what extent a social collaboration platform could help HRM. Most of the users (64%) affirm that social collaboration is useful for the company. The creation of Wiki, FAQ and of the weekly sections have been perceived as a stimulus for participation, interaction and knowledge sharing. Finally the involvement of the management in the platform has been considered very useful.

5   Concluding Remarks: The Transformation of HRM from an Analogical to a Social Process

The experimentation of the social platform has showed some interesting results that allow to refocus some of the main assumptions drawn in the previous sections of the book.

First, the use of the platform has highlighted the contraposition between two dimensions of the organizational identity that actually live together in each working context: a concrete, objective, formal dimension and a social, relational and informal dimension. This opposition is not a recent discover, since previous research in the field already distinguished the managed from the unmanaged organization (Gabriel 1995), stressing that it is in the unmanaged loose spaces of the organizational

life (e.g. in the informal encounters during coffee breaks and/or in the informal exchanged of knowledge and skills that concretely shape communities of practice) that actually an organization makes sense of practices and processes, thus developing its own distinctive culture.

However, although not new, this opposition has been further amplified by the advent of social media in organizations. Yet, because of some specific features (e.g. effective communication, rapid knowledge building and sharing, networking and informal coaching etc.), social media use in the workplace has allowed to speed up formal processes and procedures and at the same time has contributed to foster the unmanaged positive dimension of the organizational identity (as for instance favouring knowledge building processes and facilitating skills' transfer), thus confirming the value of a people-based approach and also its implications in terms HRM potentialities (Manuti and de Palma 2016).

More concretely, to come back to the experimentation presented above, the analysis of the interactions' map on the social platform examined has showed how social media use could contribute to redefine some of the most traditional hard assets of the organization. Leadership being the first among the others.

Accordingly, the information gatekeepers in this case, namely the key people who gained credibility and legitimation, do not have apical roles within the organizational hierarchy, rather they come from the bottom line. Therefore, the leadership model sustained by social media use in this case is not based on the formal assignment of power and authority, rather it is based on the informal acknoledgement of compentence and skills. That is why, the negotiated, transparent and democratic social validation that leads to the definition of the key people also contributes to the development of a positive climate of collaboration and knowledge sharing that foster the free expression of one's potentialities and skills. Consequently, through social media use the organization has also occasion to revise its talent management practices as long as within the virtual space granted by the platform, people feel free from the organization's formal bonds and are much more encouraged to challenge one's self and to measure with personal strenghts and weaknesses. As a consequence, by observing how people use the platform, how do they share knowledge, relate to each other and manage their expertise, the organization has a privileged view on the human capital heritage of the

company and thus could also make more strategic decisions in terms of human resource management.

In this vein, another important implication of the use of social media to manage people is the increase of the sense of organizational commitment. This evidence could seem counterintuitive, however it could be linked with the chances granted by the platform to share and to make sense of the information about the organization in a way that is more personal, active and aware. Differently from the passive traditional internal communication tools used by the organization to inform and motivate workers (e.g. billboards, intranet, conventions, etc.) workers are led to perceive the platform as a more lively and interactive space they can use and shape according to the specific needs of individuals and groups. It is a space where workers are free to see the organization with their eyes, where they can autonomously decide timetables, modalities and navigation routes that would take them to the information needed. In this vein, the autonomy granted to workers by the organization through the platform could probably contribute to make them feel valuable resources and not simply pieces of the whole. Consequently, commitment is not perceived as a prescription coming from the top; it emerges almost sponaneously as the result of a different psychological contract with the company, that make them feel proud being part of the same story.

In sum, the social platform could actually be a strategic tool supporting the transformation of HRM. It grants rapidity and efficacy in information processing and managing. It could be a strategic ally in the assessment process as long as it grants a privileged although virtual context where to prove soft skills and thus to access when redefining the chart in terms of roles and responsibilities. It is also precious to motivate workers, to create a sense of belonging, to improve knowledge creation and sharing and to manage communication conflicts.

References

Argyris, C., Putnam, R., & McLain Smith, D. (1985). *Action science*. San Francisco: Jossey-Bass.

Cook, N. (2008). *Enterprise 2.0. How social software will change the future of work.* Hampshire: Gower Publishing.

Gabriel, Y. (1995). The unmanaged organization: Stories, fantasies and subjectivities. *Organization Studies, 16*(3), 477–501.

Knowles-Cutler, A., & Lewis, H. (2016). *Talent for survival: Essential skills for humans working in the machine age.* Deloitte University Press. Available at https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Growth/deloitte-uk-talent-for-survival-report.pdf.

Lewin, K. (1946). Action research and minority problems. In G. W. Lewin (Ed.), *Resolving social conflicts*. New York: Harper & Row.

Manuti, A., & de Palma, P. D. (2016). *The Social Organization: Managing Human Capital through Social Media*. London: MacMillan.

Oreg, S. (2003). Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology, 88*(4), 680–693.

Schatsky, D., Muraskin, C., & Gurumurthy, R. (2014). *Demystifying artificial intelligence: What business leaders need to know about cognitive technologies.* Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/focus/cognitive-technologies/what-is-cognitive-technology/DUP1030_artificialintelligence.pdf.

Schatsky, D., Muraskin, C., & Gurumurthy, R. (2015). *Cognitive technologies: The real opportunities for business*. Deloitte University Press. Available at https://dupress.deloitte.com/content/dam/dup-us-en/articles/cognitive-technologies-business-applications/DR16_cognitive_technologies.pdf.

Schein, E. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey Bass.

Weick, K. (1995). *Sensemaking in organizations*. Thousand Oaks: Sage.

Weick, K., & Quinn, R. (1999). Organizational change and development. *Annual Review of Psychology, 50,* 361–386.

6

Conclusion

Abstract This section attempts to draw a conclusion to the several questions posed in the course of the book. The authors start from the social representations of technology seen both as a magic solution and as a restriction, a substitution to human action. Mediating these positions, the authors suggest to adopt a critical perspective to analyse the impact of cognitive technology in the working setting. They content that technology provides tools that have potentialities that if adequately exploited might certainly lead to the improvement of the social and working context. With special reference to the latter and to the role played by the HR function, the authors conclude that these tools should be carefully framed within the organizational culture. Their use should be aimed to reinvent how to manage people but always adopting a people-based and bottom-up approach to human capital.

Keywords People-based view of technology
Challenges and opportunities of technology · Digital HRM

The social, economical and cultural scenario that frames the current labour market is forcing scholars and practitioners to debate about

the positive and negative implications that some of the most relevant changes will engender for people.

This book has attempted to give a contribution in this direction by focusing attention on the role played by cognitive technologies in restructuring not simply contexts and tools, rather in redefining the experience people make of the social world.

Yet, the capillar diffusion of cognitive technologies in several domains of work and leisure have prompted calls for a reconsideration of the man-machine balance, basically rediscussing most of the current knowledge about organizational behavior and life experience.

Certainly, as it happens whenever a radical cultural revolution takes place, apocalyptic stand opposite to positive views. According to a most pessimistic perspective, technologies are depriving men of their inbuild emphatic nature. The constant interaction and entrustment to technologies are impoverishing human abilities in relating, collaborating, communicating with others and with the wider social context. This has been one of the main argument maintained by the supporters of the "negative social effects" of technology, who already at the end of the 80s, when the technological revolution was at its begininning, started to highlight the negative implications of media use for social life at work, often resulting among others in feelings of isolation or depersonalization (Kiesler et al. 1984; Sproull and Kiesler 1986).

More than 30 years have passed since these studies, technology has progressed further, has become 'intelligent', 'cognitive', it has been oriented toward the fulfilment of many individual, group and community needs. However some scholars as well as a part of the public opinion still continue to be sketpical and resistant about its diffused introduction in everyday life (Bargh and McKenna 2004), even in front of contradictory results about its beneficial effects (Kraut et al. 2002).

Accordingly, the change brought about by technology in social and working life is sensible. With special reference to the working context, technology has contributed to reengeneer processes, to foster innovation, to support change and to create a process vision that certainly impact on productivity and performance (Melville et al. 2004).

Of course, from an employee perspective, cognitive technologies are also revolutioning the workplace in terms of job demands and digital

(cognitive) divide (Fonseca 2010). Yet, the technological turn is pushing people to rapidly adapt to change, to develop new and sophisticated skills that allow them to manage their tasks differently and their time more efficiently (Brynjolfsson and McAfee 2014; Davenport 2015). Paradoxically, at least with respect to what some detractors content, technology is also allowing to increase collaboration and teamwork (Brown et al. 2010).

In this vein, scientific literature as well as good practices from real concrete case studies (Cook 2008; Campbell 2008) have emphasized the need to consider technology adopting a critical and neutral point of view. Yet, digital tools are not good or bad per se: it is the use that people (and organizations) make of them that could concretely change the context and engender positive or negative results. Undoubtely, technology could make life easier and future progress encourages to think that it will make it smarter and smarter. However, beside these positive implications, the risk is that if not consciously exploited these opportunities will turn into an acritical passivization of human action. An example could be the growing trend to customization of services that is diffusing thanks to smart technologies. Actually, sometimes cognitive technology anticipates human needs suggesting desires that are still not expressed (in commercial terms often connected to superfluous and useless purchases), often depriving users of the possibility to exercise their creativity and fantasy. Conversely, we should not forget that cognitive technology is the output of human intelligence, therefore it could not be a pitfall and/or a menace for human autonomy. Even if labelled as "agile" or "intelligent", technology is "smart" only because it allow individuals to use them smartly, namely in a way that could better satisfy their needs and enhance their potentialities. Consequently, technology is a tool that need to be used critically, being always aware of the affordances it provides.

This bottom-up perspective, focused on the primacy of humans who design and use technology on machines, is the lens that this book has adopted to frame the question and to further connect it to the strategic role of Human Resource Management in organizations. Accordingly, explorative results from a case study have supported that a critical and enlighted use of cognitive technologies in organizations could transform

them into a precious ally to design and manage human resource practices.

The digitalization of organizations has been proved to contribute to increase employees' engagement, social collaboration, team communication, to the extent that managers, executives and employees perceive technology as an integral part of the organizational culture, as an artifact allowing members to behave according to organizational values and in line with the official vision and mission. Yet, technology is HR tool that to be beneficial and effective with reference to the organizational aims needs to be properly used and promoted. Employees are encouraged to exploit the potentialities of a digital workplace only if and to the extent that they perceive that the management supports the project, believe, invest and endorse its use for well-defined, unambiguous and negotiated organizational objectives.

On the other hand, far from being dead, murdered by sophysticated intelligent metrics and robotics, the function of HR in organizations is still strong and alive. Certainly, mainstream old-fashioned people management's practices have proved their obsolescence following to the digital revolution. Nevertheless, if managers and executives engage in reinventing this strategic function, in light with a critical view of technology, that is by using it to put people first, to give them a centrality in the working context, to enhance their skills, they will surely mark a competitive advantage.

In this perspective, technology is not an absolute challenge for organizations, it is a chance to give them new nourishment. And this lead us back to the beginning: the review of the literature as well as the analysis of the case study have been addressed to show that if organizations wants to adopt a people-based approach to HRM, technology could be a valid support to reach this goal. Accordingly, the affordances provided by cognitive technology enable organizations to know better their employees, to design tailor-made tools and contexts basing on the features and skills of their human capital, thus enhancing people's potential and increasing their engagement.

Consequently, employees are subjects of technology not objects, they feel involved and are encouraged to participate more and better. This is

our people-based view of technology that to be achieved needs to find echo into a people-based view of the organization.

References

Bargh, J., & McKenna, K. (2004). The internet and the social life. *Annual Review of Psychology, 55,* 573–590.

Brown, S., Dennis, A., & Venkatesh, V. (2010). Predicting collaboration technology use: Integrating technology adoption and collaboration research. *Journal of Management Information Systems, 27*(2), 9–53.

Brynjolfsson, E., & McAfee, A. (2014). *The second age machine*. New York: Norton.

Campbell, R. (2008). Social software in the enterprise—A review of the literature. In N. Cook (Ed.), *Enterprise 2.0. How social software will change the future of work* (pp. 133–154). Hampshire: Gower Publishing.

Cook, N., (2008). *Enterprise 2.0. How social software will change the future of work*. Hampshire: Gower Publishing.

Davenport, N. (2015). *Cognitive technology: The rise of "bionic brains"*. Deloitte University Press. Available at https://dupress.deloitte.com/dup-us-en/focus/cognitive-technologies/artificial-intelligence-technology-bionic-brains.html.

Fonseca, C. (2010). The digital divide and the cognitive divide: Reflections on the challenge of human development in the digital age. *Information Technologies & International Development, 6,* 25–30.

Kiesler, S., Siegel, J., & McGuire, T. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist, 39,* 1123–1134.

Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet paradox revisited. *Journal of Social Issues, 58*(1), 49–74.

Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information technology and organizational performance: An integrative model of it business value. *Management Information System Quarterly, 28*(2), 283–322.

Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science, 32*(11), 1492–1512.

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