Organizational Innovation – A Means to Enhance Quality of Life for Employees in Knowledge Economy

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Abstract. This paper provides an overview of the latest significant researches, both in academic and public institutions, both theoretical and empirical, both in Europe and worldwide, on organizational innovation. It synthesizes the different approaches especially on the effects of innovative practices on the employees' quality of life, as they emerge from the empirical research conducted in different organizations and countries, mainly in organizations of knowledge-intensive business services sector, specific to knowledge economy. Organizational innovation is a new way of organizing the business practices of the organization, including knowledge management, in workplace organization or external relations; it refers to practices that have never been used before by the company. Knowledge-based organizations are built on intangible assets, on the knowledge, experience and competences of high-skilled human resources, who represent the most valuable resource of these organizations. The secondary data analysis we conducted showed that workplace innovation leads to employees' welfare, health and therefore to their motivation and loyalty. Unfortunately, in the last five years, the percentage of European companies that adopt new, innovative forms of organization ("discretionary learning" forms), meant to ensure better working conditions, decreased. Moreover, in Romania there is a lack of harmonization between legislation and the development of activities specific to the knowledge economy; that is why the conclusions of the paper consist in several guidelines for Romanian business environment in order to improve the "golden collars" employees' quality of life.

Keywords: organizational innovation, workplace innovation, highly qualified employees, knowledge-based organizations, employees' quality of life.

Innovation and organizational innovation - conceptual highlights

Innovation is a concept with a very large applicability, whose characteristics vary based on the field of reference. According to the National Institute of Statistics (2013, p.394), innovation is an activity resulting in either a new product (goods or services) or a significantly improved one, a new process or a significantly improved one, a new marketing method or a new organizational method. Glodeanu et al. (2009, pp.32-52) quote the definition of innovation established by the European Union as "an accomplishment of a new idea in the current direct practice, either in a commercial manner, or in a voluntary and public sphere", by "the diffusion, assimilation and the usage of invention in different fields of the society". They continue by adding that it is accomplished either by "the transfer of existing knowledge from one field to other fields (the leverage strategy)", by "using existing knowledge to redefine what is already known (the expansion strategy)", by "creating a new field of knowledge (the accomplishment strategy)", or by "creating a new field of knowledge around a vision or a vague idea on a future field of knowledge (the experimental strategy)" (Glodeanu et al., 2009, pp.34-35). The latter one is the fundament of radical innovation, ensuring thus the break from the existing models.

Tudor Rickards emphasized the role of creativity in innovation, considering innovation as "a process beginning with a creative idea and ending with implementation, from which point execution becomes routine" (cited in Landry, 2008, p.107) or as "those behavioural and social processes whereby individuals, groups or organizations seek to achieve desired changes or to avoid the penalties of inaction" (Rickards, 1999, p.45). Other authors emphasize the characteristic of innovation of being a process and a result at the same time: "innovation is production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems; it is both a process and an outcome" (Crossan & Apaydin, 2010, p.1155). As an expression of transforming knowledge into the main resource, innovation is the most important means of creating added-value (Nica, 2008, p.229). Soete, Verspagen and Weel (2010) (cited in Lopez-Leyva, Castillo-Arce, Ledezma-Torres & Rios-Flores, 2014, p.221) consider innovation as a system composed of five elements: sources of innovation, institutions and organizations, interactive learning, types of interactions and social capital, in which four main players are involved: the policies of a country, corporations whose core business consists in R&D, human capital and industrial structure.

In a large sense, the notion "organizational innovation" refers to the creation or adoption of an idea or behaviour that is new to the organization (Daft & Damanpour cited in Lam, 2011, p.115). According to Eurostat and (2005, p.17), organizational innovation consists OECD in the implementation of new organizational methods, that can be changes in business practices, in workplace organization or in the firm's external relations. Armbruster et al. (2008, p.645) details this, defining organizational innovation as "comprising changes in the structure and processes of an organization due to implementing new managerial and working concepts and practices, such as the implementation of teamwork in production, supply chain management or quality-management systems". He elaborated a typology of organizational innovation, dividing it in four types: 1. structural organizational innovation, which may change the divisional structure of organizational functions, hierarchical levels and information flow; 2. procedural organizational innovation, which may modify the process and operation routines within the firms; 3. intra-organizational innovation, that takes place within an organization; 4. inter-organizational aspects of innovation, which refer to new organizational structures and processes that exist beyond the borders of the firm (Armbruster, 2008, p.646).

Also Lam (2011, p.117) states that although different researchers from classical literature on organizational innovativeness studied the influence of individual, organizational and environmental variables on organization's propensity to innovate, most of them focused on organizational structure. Crossan and Apaydin (2010, p.1154) establish a "comprehensive multi-dimensional framework of organizational innovation, linking leadership, innovation as a process and innovation as an outcome". In this context, Nielsen and Lundvall (2007, p.65) bring a new approach, referring to innovation from the perspectives of a social dimension and the relations between management and the employees of the innovative company, describing it as a process of creating knowledge, in which the speed and the direction of creating knowledge reflect the organizational features of the company, and implicitly, the commitment of employees to various forms of direct or indirect participation to (in) decision-making, as well as the investments made in increasing the competences of the employees.

Corriat (cited in Mako et al., 2013a, pp.79-80) notices that it is difficult to define organizational innovation because of its "multidimensional character" and thus it can only be identified as a "joint group of attributes": organizational innovation consists of "a cluster of changes affecting the labor division and coordination patterns that prevail within a given organization, these patterns possessing a triple dimension (information,

knowledge and know-how, interests)". According to him, different surveys use different implicit notions of organizational innovation and it is not possible to give a unique and explicit definition of organizational innovation.

Theoretical aspects regarding the knowledge-based organizations

World Bank (2011) defined knowledge economy as "one where organizations and people acquire, create, disseminate, and use knowledge more effectively for greater economic and social development: there are closer links between science and technology; innovation is more important for economic growth and competitiveness; there is increased importance of education and life-long learning; and more investment is undertaken in intangibles (R&D, software and education) which is even greater than investments in fixed capital". This knowledge economy ensures the functioning conditions for the knowledge-intensive organizations, defined as "organizations in which the main resource is not given by the fixed assets, such as buildings, machines or financial capital, but rather employees and the competences they display (abilities, experience, knowledge and values), which are essential to the creation of the intangible goods produced here" (Leovaridis, 2008a, p.849). These are companies depending on "the production, usage and originality of their knowledge fund" (Donaldson, 2001, p.957), "companies in which most of the work is intellectual, and the employees who are qualified and highly trained are the majority of the workforce" (Alvesson, 2000, p.1101).

Within the knowledge economy, the essential role is that of the work force, as owners of tacit knowledge (Vătămănescu, Andrei, Leovaridis & Dumitriu, 2015), meaning "the knowledge existent inside people's heads in the shape of knowledge, intuition, opinions, abilities, competences, experiences, values, shared norms, learning motivations and capabilities, subjective emotions, cognitive, psychological, axiological and behavioral aspects that one might not be aware of" (Thite, 2004, p.35). On the other hand, explicit knowledge is "the objectified and exteriorized one, capable of surviving through writing, speech, signs and products that incorporate knowledge: books, magazines, studies, presentations of experiences, patents, brands, disks, works of art, official values and norms, CDs etc." (Glodeanu et al., 2009, pp.70-71). Lazonick (2011, p.51) also highlights the role of the knowledge of expert-employees in defining the innovative company: "in order to fully understand the mechanisms of an innovative company, one must fully understand the role of organizational learning processes - the relationship between the tacit knowledge and the codified one, between individual and collective capacities and between what has been accumulated until a specific moment and what had resulted from accumulating that knowledge in time".

Brătianu (2013) brings a new view on organizational knowledge, totally different from the classical ones proposed by Nonaka (tacit vs. explicit knowledge), based on the metaphor that organizational knowledge is a field rather than a stock, or stocks and flows. According to him, the organizational knowledge is composed of three different fields: the cognitive field (which contains knowledge about what is), the emotional field (which contains knowledge about how we feel) and the spiritual field (which contains knowledge about people's aspirations and life values); these fields are non-uniform, nonhomogeneous and interact in a dynamic way, these three types of knowledge are in a continual interaction and transformation (Brătianu, 2013). Israilidis, Lock and Cooke (2013) also propose a new alternative perspective on organizational knowledge management by elaborating the concept of Ignorance Management in multinational organisations. They discuss "the difficulties employees face in understanding and comprehending what they need to know in order to to do their jobs, and what implications this can have within the global technology intensive environments. The key conclusion drawn from the study is to re-examine managerial strategies in multinational organisations by acknowledging and understanding the existence of unknowns. The critical question is not just managing what is known but also trying to find ways to manage the unknown" (Israilidis et al., 2013, pp.82-83).

Thus, organizational innovation consists especially in giving a particular attention to knowledge resources. Leovaridis (2008b, p.258) approaches considering a knowledge-intensive organizational innovation, bv organization an innovation in itself, because this type of organization changes a whole series of aspects regarding the organizational dimension and that of human resources (for instance, from using specific traditional resources - land, energy, etc. - to knowledge resources; from mass management to a more personalized one; from respecting job requirements to negotiating competences etc.). These organizations are founded on the "anthropocentric management", defined as "a new type of human resources management, based on training people and competences, offering an altogether different vision on what human resources are (and what they should become)" (Leovaridis, 2011, p.51). According to this new type of management, "the aim is not to be able to use the human being (as a means) to a larger extent and better, but also to be able to consider the individual as the end goal and to see what the organization can and needs to do in order to help the respective individual become an accomplished person, but on a human level and through his work" (Hoffman, 1999, p.50). Consequently, within a knowledge-intensive organization, the employee refers to the organization not only in traditional economic terms (payment, working conditions, duties), but also in psychological ones, through the manner in which the organization perceives and "treats" them, allowing them to develop themselves professionally.

Here is a summary of the main features of knowledge-intensive companies, which differentiates them from other organizations by the nature of their work and the leadership and organization manners: highly qualified employees, who perform knowledge activities, using in their work both intellectual and symbolic abilities; a high degree of autonomy and flattened organizational hierarchies; the use of flexible, adaptable and ad-hoc organizational forms; the need of an extended communication for coordination and problem solving, due to a high level of ambiguity; client-orientation, especially in the case of companies providing professional services; strength and information asymmetry given by the position of the expert (often favoring the profession to the disadvantage of the client); uncertain and subjective evaluation of the quality of the accomplished work results (Alvesson, 2004, p.19).

Recent researches on organizational innovation - a secondary data analysis

Research methodology consists in a secondary data analysis on the latest – and most significant for our topic – researches conducted both in academia and by official institutions, on organizational innovation and its consequences on the working conditions of employees and on on the performance of the firms.

The objective of the research is to identify the effects that the introduction of new forms of work organization reunited as the "workplace innovation" has on the employees' quality of life particularly those high-skilled in knowledge-intensive organizations, and also on the performance of the company.

One of the most recent researches on this topic establishes a relationship between knowledge management and networked innovation (Valkokari et al., 2012). This research has been conducted in six business-to-business companies, of various sizes, with a number of employees between 20 to over 2000; over 10 in-depth interviews have been performed, as well as two focus-groups with 10-20 reprezentatives of these firms (from

entrepreneurs and chief executive officers to lawyers and patent engineers). The main question of this study is exploring how firms manage knowledge in the context of networked innovation, for example collaboration and joint innovation involving multiple actors. The Finnish researchers' paper conclude that "with a strategic approach to knowledge management, firms are able to utilize networked innovation when they understand their partner's business models and strategic intents, for example their motivation to collaborate. This understanding also enables firms to negotiate about roles, responsibilities and rights between the collaborators. Moreover, the collaboration and interaction processes within networked innovation - rather than simply the formation of innovation networks were found to play a crucial role" (Valkokari et al., 2012). Another important result of the research, from a theoretical point of view, is the distinction between the two basic collaboration models of networked innovation: transaction networks (within which explicit knowledge such as intellectual property rights is simply transferred from one actor to another) and co-creation networks (within which there are always relationships, communication and interaction of some kind between the actors, that is why the risks and opportunities of innovation are higher within these cocreation networks). The authors recommend managers to establish the roles and responsibilities in network innovation management, to take into consideration both the objectives of their cooperation as well as the conflicts of interest, to create contracts based on mutual advantages and to share and combine knowledge in order to build a unique knowledge for all the actors of the network (Valkokari et al., 2012).

More and more, in recent years, organizational innovation is approached as innovation in work organization or innovation in the workplace, and the latter is treated in terms of social, human dimension, linked to improving the working conditions of employees. Thus, workplace innovation has been recently defined as "the implementation of new and combined interventions in the fields of work organization, human resource management and supportive technologies" (Pot, 2011, p.405), being related to improvements in organizational performance on the one hand and in employee well-being and loyalty on the other hand. In this context, Eurofound (European Foundation for Improving of Living and Working Conditions) conducted a study in 13 EU states, based on case studies carried out in different companies where workplace innovations have resulted in positive outcomes. The main aim of the research was to assess the impact of these innovations on the performance of an organization and the effects for employees.

The research methodology included face to face interviews and focus groups with various categories of employers and employee representatives. but also secondary data analyses based on websites, newspaper articles, company reports. The research results show that innovations implemented by the case study companies may be grouped in three categories: the first one is single primary focus aiming to improve "organizational performance, typically focused on lean manufacturing principles, organisational efficiency and improved product quality (Bombardier, FAVI, Lufthansa, NUH, Radiometer), also service quality innovations (Finnish care home)"; the second type of innovations are parallel focus, "with multiple innovations, some aimed at organizational improvements and some aimed at benefiting employees such as improved communication, autonomy for employees, training/performance management, flexible working opportunities combined with efficient use of workspace (Elica, Kellogg, Rabobank, ROFF)"; the third category is hybrid primary focus with "innovations aimed at employees with consequent benefits for organization, for example health and well-being management and promotion initiatives (Slovenian retail group, Volkswagen Poznań)" (Cox et al., 2012, p.69). Authors of the research conclude that workplace innovations that facilitated task variety and decision-making encouraged a sense of responsibility and autonomy had a strong impact on employees, increasing job satisfaction and improving the employees' well-being and work-life balance, health and lifestyle."An increase in overall employee motivation was gained through measures that included job enrichment, greater autonomy, skills variety and development, enhanced training, increased trust and support, enhanced job security and opportunities for suggestions or challenge" (Cox et al., 2012, p.2). Unfortunately, workplace innovations consisted in increased autonomy, task variety, flexibility and decision-making authority had a negative impact, they led to more work pressure, workloads and a faster work pace.

Only 47% of European workers are involved in improving work organization or work processes in their department or enterprise, only 47% are consulted before targets for their work are set and of all workers, only 40% can influence the decisions that are important for their work (Totterdill et al., 2014). But there are differences between European countries regarding the extent to which companies from different European countries have introduced organizational innovation: thus, EU-27 countries were categorized according to the "cognitive dimension" of jobs (learning new things at work, job rotation requiring different skills, autonomy in quality supervision) and forms of training ("formal" versus "on-the-job training"): Nordic countries, continental countries. States belonging to the Nordic group perform visibly better than the EU average in all aspects: at

least 4 employees out of 5 can learn new things at work and have autonomy to evaluate quality and every second employee participates in task rotation requiring different skills. The Post-Socialist countries are at the other pole of the country groups, where each cognitive dimension of the jobs has a lower value than the EU–27 average (less than one-third of these employees rotate jobs). This group is followed by the Mediterranean countries, which have a similar pattern of job characteristics. The Anglo-Saxon and the Continental countries are in the middle position between the Nordic and the Mediterranean/Post-socialist country groups (Mako et al., 2013a, p.94).

Another important research conducted at European level, Working Conditions in the European Union: Work Organization (Valeyre et al., 2009, pp.12-14) identified four types of organizations, according to the job characteristics related to work organization: discretionary learning forms (characterized by autonomy in work, learning and problem solving, task complexity, self-assessment of quality of work, autonomous teamwork), lean production forms (characterized by teamwork, autonomous or otherwise, and job rotation, particularly multi-skilling), taylorist forms (opposite to discretionary learning class, with low autonomy in work, particularly in the methods of work, with little learning dynamics, low task complexity, but constraints on the pace of work, repetitiveness and monotony of tasks, and quality norms), traditional or simple structure forms (traditional forms of work organization where methods are largely informal and non-codified, simple organizational structure described by Mintzberg). Lundvall (2014) updates the original analysis of forms of work organization and show how the frequencies of the different forms have evolved over the 2000s (Table 1). The results show a slight increase (by 2%) in the discretionary learning forms during 2000-2005. counterbalanced by a decrease in the traditional forms. In 2010, especially because of the 2008 financial crisis, the data point out a significant decline of discretionary learning forms, associated to an increase in the more bureaucratic lean forms and to a lesser extent by an increase in the traditional and taylorist forms.

Table 1. Frequencies of forms of work organization by three survey waves (Third, Fourth and Fifth European Working Conditions Survey) % (Source: Lundvall, 2014, p.4)

Wave	Discretionary Learning	Lean Production	Taylorism	Traditional	Total
2000	35,1	28,2	17,4	18,3	100
2005	36,8	28,6	17,8	16,8	100
2010	31,8	31,3	18,6	18,3	100

A group of Hungarian researchers conducted a study with the objective of better understanding the diffusion and drivers of organizational innovation and the practice of knowledge development by comparing the knowledgeintensive business services (KIBS) sectors in Hungary and Slovakia. The 200 Hungarian and 100 Slovakian businesses with more than 10 persons, included in the survey, covered both the manufacturing and the KIBS sectors. The questionnaire, addressed to managers and owners of the companies surveyed, included items grouped in four sections: general characteristics of firms, composition of management and institutional transfer of business practices, diffusion and drivers of organizational innovation, characteristics of knowledge development practice in the firm (Mako et al., 2013b).

Regarding the diffusion and drivers of organizational innovation, structural organizational innovation is less often used than its procedural version, because structural organizational innovation affects both the core components and their relationships within the organization. The survey showed significant differences in diffusion of organizational innovations in the Hungarian and Slovak KIBS sectors: forms of structural (or radical) organizational innovation such as project-based work, flat organization and interdisciplinary working groups are more commonly found in Slovak KIBS company; regarding some procedural organizational innovations, differences are greater: teamwork (89.6% versus 41.7%), job rotation (28.9% versus 9.7%) are more used in Slovak than Hungarian firms. On the other hand, in Hungarian KIBS companies, quality circles (23.7% versus 14.4%), benchmarking (37.3% versus 21.6%) and collecting suggestions from employees (49.7% versus 41.2%) are more common.

	Hungary	Slovakia			
Structural organizational innovation					
Project-based work	34.8%	69.1%			
Flat or lean organization	10.7%	13.4%			
Inter-professional (interdisciplinary) working groups	13.4%	36.1%			
Procedural organizational innovation					
Quality Assurance and Auditing Systems (e.g. ISO and	21.9%	33.0%			
TQM)					
Collecting suggestions from employees	49.7%	41.2%			
Teamwork	41.7%	89.6%			
Benchmarking	37.3%	21.6%			
Quality control carried out by rank-and-file	23.7%	14.4%			
employees					
Job rotation	9.7%	28.9%			

Table 2. Types of organizational innovations in KIBS sector (Source: Mako et al., 2013b, p.158)

Based on their researches in different companies, Maitland and Thomson (2014, p.2) distinguish between "future work" and "flexible work": flexible work arrangements derive from industrial age work model - fixed hours, fixed location and management by control, without fundamentally altering it, while "future work is a new model for the digital age, which measures and rewards people for results, not for hours (...) it gives people information, tools and clear objectives, and trusts them to get on with achieving those objectives in the way that works best, requiring a shift from command-and-control to management by trust".

Another element of interest to the present study is the multicultural approach of knowledge management and organizational innovation. Magnier-Watanabe et al. (2011) present the case of a Japanese pharmaceutical company having subsidiaries in France, United States and China. The Japanese researchers "evaluate the effects that leadership, organizational culture and control and work style have on knowledge management, all defined in terms of the socialization process. externalization, combination and internalization". Based on the research using questionnaires, they "compare the manner in which the above mentioned organizational factors influence knowledge-management processes within the respective organizations". The research has shown that these factors have a different influence on the knowledge management methods and practices based on the characteristics of each country and recommends that "knowledge-management activities need to be adapted to the idiosyncrasies of each local organization, without renouncing to the global vision of the company" (Magnier-Watanabe et al., 2011). In the same country, the company Toyota Motor Corporation chose to use the "learn local/ act global" model and evolved from a mere transfer of knowledge from the Japanese company to subsidiaries to the major preoccupation of creating knowledge and collecting tacit local knowledge in foreign markets through its employees from the local level (Ichijo & Kohlbacher, 2008).

A research study conducted in an IT consulting company in India (Lam, 2005) shows the tight connection between knowledge management and knowledge culture. The Indian company did not have any kind of knowledge culture. In addition to that, "company culture" was characterized by: strong competition between employees, lack of valuing knowledge and sharing with others, absence of reward or incentives for sharing this knowledge, an exaggerated concern of keeping one's work place, stigma associated with the reliance on someone else's ideas, underestimation of employees, a preference for transmitting knowledge in a classic face-to-face manner, lack of trust in the quality of knowledge of the younger employees.

Another research, conducted by Kathryn Van Treuer in Australian business environment (Van Treuer, 2006), studied the relationship between leadership, organisational climate and innovation, on 142 administrative and health-care professionals from a medium-sized private consulting firm in Australia. According to the results of this study, the cohesion, autonomy and recognition, felt by employees, as well as the absence of pressure create an innovation climate, while excessive pressure influences it negatively: "within an innovative organization the staff must feel a cohesive and shared purpose, and that they should not feel over pressured"; at the same time, the employees "need to feel autonomous, and need to feel that they will be recognized for their achievements (Van Treuer, 2006, p.196).

Lopez-Leyva, Castillo-Arce, Ledezma-Torres and Rios-Flores (2014) assumpted that the activities related to the production, aquisition, diffusion and application of the knowledge may positively and significantly influence the economy. The study refers to the period 1990-2010, considered "to correspond to the boom of the intensive use of the knowledge in the world economy" (Lopez-Leyva et al., 2014, p.228). The research partially confirmed the initial hypotheses that knowledge activities are positive and significant to economic performance. The production and application of knowledge were correctly evaluated, because the sector that produces knowledge is more productive than the industrial sector where knowledge is applied. Diffusion alone is not enough, it should be supported by "higher productive application of knowledge" (Lopez-Levva et al., 2014, p.236). As a final conclusion, the Mexican researchers state that "economic benefits of a growing knowledge base economy are achieved when they are adapted and applied to the industrial system and then disseminated to the entire production network" (Lopez-Leyva et al., 2014, p.236).

Before presenting the Romanian researchers' results, a brief review of the statistical background on the innovative organizations is necessary. The situation of Romania, compared with that of other European countries, has been highlighted by some studies of the European Union. The average percentage of innovative enterprises in EU-27 (as % of all UE-27 enterprises) is about 53%, as mentioned by Eurostat (2013): this indicator value oscillates between almost 80% in Germany and 27% in Bulgaria; for Romania, the indicator value is about 31%. In Romania, in 2010-2012, compared with the previous period 2008-2010, the share of innovators decreased in all three categories of innovators (enterprises with only product and/or process innovation, enterprises with both product and/or process innovation, enterprises with both product and/or process innovation and organizational and/or marketing innovation): thus, in the period 2008-2010 the share of enterprises with product and / or

process innovation was 4,3%, in the period 2010-2012 it was 1,9% (so, a decrease of 2,4 percentage points). The share of firms that have implemented new or significantly improved organizational and / or marketing methods decreased by 2,1% percentage points (from 16,5% to 14,4%). The share of those innovators who introduced both products and / or process innovation and methods of organization and / or marketing decreased by 5,6 percentage points (from 10% to 4,4%) (National Institute of Statistics, 2014).

Another referential study is the Innovation Union Scoreboard series, initiated in 2001 and published annually. The 2013 edition is grouping the European countries based on the values of the indicators referring to innovative performances, into four main groups (European Commission, 2013): innovation leaders, innovation followers, moderate innovators, modest innovators. In this edition of the study, Romania is situated in the last group ranked 26 among 27 member states, according to its innovative performances (measured overall). Our country's strengths consist in the indicators grouped in the "human resources" and "economic effects" dimensions; whereas the weaknesses are in "linkages & entrepreneurship". This can be also the effect of the fact that our innovative entreprises pay the highest attention (31.9% of the total innovative enterprises) to financial incentives for the employees developing new ideas, compared to other succesful methods stimulating new ideas or creativity used in innovative enterprises from other European countries: brainstorming sessions, job rotation of staff, multidisciplinary or cross-functional work teams, nonfinancial incentives for employees and training employees (Eurostat, 2013). Regarding the economic effects, Romania is comparable with EU27 at knowledge-intensive services exports, with 43.03% of total services exports, compared to 45.14% in EU27 and sales of new-to-market and newto-firm innovations, with 14.28% of turnover, compared to 14.37% registered by EU27 (Hollanders & Es-Sadki, 2013, pp.70-71).

In order to evaluate how Romanian companies, especially in the economic sectors specific to knowledge economy, embrace the workplace innovations, a research has been conducted on the life quality of the highly-qualified employees, in the knowledge-intensive organizations from five service sectors: marketing-advertising, IT&C, banking-finances, research-development and higher education (KIBS sectors) (Leovaridis, 2013, pp.192-194, p.196). The research used qualitative, descriptive and exploratory methods, given the fact that the structuring of organizations based on knowledge is still insufficiently defined in Romania. The aim of the in-depth, face-to-face interviews was to obtain complete information, thorough explanations and more accurate descriptions. The semi-

structured interview was used for both highly-qualified employees in the knowledge-intensive service sectors, as well as the managers in these sectors (68 employees and 12 managers, a total of 80 persons). This technique has the advantage of an increased freedom of discussion, by adapting it from one question to another, based on the aspects revealed by the respondent. The questions referred to general, common dissatisfactions for this type of employees, but also to dissatisfactions specific to each sector of activity, regarding specific aspects of the quality of their professional life: health problems, working time, including atypical ones, the complexity and intensity of work, professional development opportunities, autonomy degree, decision-making manners and the leadership style both within the team and the organization, motivational techniques used, organizational climate, organizational culture and communication, measures to improve employee life quality etc. Of these, the actual paper shall refer only to those that could be related to various forms of organizational innovation. Regarding the cognitive dimension of the work, three quarters of the people interviewed from the advertising sectors, two thirds of the IT and banking sectors and all those of the RD and the higher education sectors admit that more than half of their daily activities are creative ones, with percentages ranging between 50 and 90% in the advertising, RD and higher education sectors, 50-80% in the IT sector, and 50-70% in the banking sector. Work in the higher education, advertising and banking sectors consists in solving and adapting to new, unpredictable things, while the employees of the IT and RD sectors admit to having to solve complex issues. Learning new things is specific to the IT, RD and higher education sectors. When discussing the professional development of employees, those of the banking and IT sectors have benefited from courses either paid by their companies or offered in-house; this was not the situation in the higher education and RD sectors. Autonomy at workplace is expressed by the possibility to choose or change work speed, order of tasks and work methods. This is allowed in the RD and higher education sectors, and more moderately in the sectors in which deadlines need to be met, such as the advertising, IT and banking sectors. The possibility to take decisions and influence one's work is restrained in the higher education and IT sectors, moderate in the banking and advertising sectors and very high in the RD sector.

Teamwork is a feature of the advertising, IT and RD sectors (and teams have a high autonomy), whereas in the case of higher education and banking, this is rarely the case (but when it happens, teams have autonomy, too). In the sectors of privately-infused capital and multinational companies (advertising, IT and banking), the important decisions regarding strategy are taken by the organization's management, following the instructions from the parent-company; in the IT and advertising sectors, relations

between managers and subordinates are on equal footing, whereas in the banking sector this case is very rare. The IT and banking sectors have internal order regulations to follow, which is not the case in the advertising sector. The control of employees is both directly through supervision, and indirectly on the basis of results. In the RD and higher education sectors, infused with state capital, important decisions are made by the Scientific Board/ Faculty Board and the University Senate, but only rarely after consulting the researchers/professors in extended meetings; there is cooperation between managers and subordinates, but only in a hierarchical manner. There are also internal regulations to be followed in all cases and employee control is performed especially indirectly, based on results – through regular reports including opinions from colleagues and students etc. Decisions within the team are made after consulting members, based on the existing equality relations.

Discussions

Organizational innovation, or workplace innovation, as recently called, is one of the most important factors leading to organizational performance, in the current conditions, when competition between organizations in the knowledge economy takes place on the field of knowledge, of competences held by employees and not of their physical power or tangible goods owned by the organization. As our secondary data analysis showed, workplace innovation (including task variety, autonomy, participation in decisionmaking, teamwork, learning, self-assessment of work quality etc.) leads to employees' welfare, health and therefore to their motivation and loyalty.

However, in the last five years, in Europe the percentage of companies that adopt new, innovative forms of organizations ("discretionary learning" forms), meant to ensure better working conditions, decreased considerably: "the deterioration of the quality of work has implications both for Europe's growth prospects and for the welfare of workers. In a learning economy a reduction in participatory learning undermines the long term competitiveness of Europe as well as workers' welfare" (Lundvall, 2014, p.5).

Despite the rapid evolution of economy and its passing towards the knowledge-driven economy, and given the fact that the issue of knowledgeintensive organizations and knowledge workers will become more and more present and pressing in the Romanian reality, we believe that current legislation in the field in our country is not sufficiently adequate to these new demands from the knowledge economy. There is also a lack of harmonization between legislation and the development of activities specific to the knowledge economy, as one of the interviewed experts in the Romanian presented research stated that "work protection legislation is still in the industrial era".

A knowledge-based economy imposes, within current organizations of the services sector, organizational innovations based on a management style focused on the expert-employees, as an essential resource of the organization, and on the negotiations with them. Currently, there is a new organizational context, in which the financial stimulation of the "golden collar" employees is insufficient, requiring other motivational factors in order to ensure their loyalty. Some of the highly-qualified Romanian employees working in various knowledge-intensive sectors who were interviewed made several suggestions, in order to improve the situation on a micro-level and to increase their quality of life. These are: reducing overload, offering opportunities of professional development, consulting employees with regard to the tasks given to them, as well as regarding the major decisions to be made for the organization, organizing socializing activities between co-workers and creating a climate that could emphasize friendship, mutual aid between colleagues and informal communication etc. (Leovaridis, 2013, p.222).

Far from having fully covered the topic of organizational innovation in the knowledge-based economy, the present paper draws an overview of the international and especially European concerns, as well as those of national researchers, in the large field of knowledge-based economy and highlights certain theoretical and practical aspects which are specific to the Romanian society. The paper can be continued with a quantitative, comprehensive and systematic content analysis of all articles on organizational innovation in a number of Romanian and international academic journals (for the past five years, for example).

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