Introduction of Smart Working in the Enterprises of Russia and Italy: Case Study

A Fedorova¹, O Koropets², M Menshikova³

¹Ural Federal University, ul. Mira, 19, Yekaterinburg, 620102, Russian Federation
²Ural Federal University, ul. Mira, 19, Yekaterinburg, 620102, Russian Federation
³Sapienza University of Rome, Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

E-mail: a.e.fedorova@urfu.ru

Abstract. The article focuses on the issues of transformation of labour relations between employers and employees of Russian and Italian enterprises due to the processes of digitalization which determine the possibility of introducing new technologies in the organization of labour. One of the objectives of the research presented in the article is to analyse the advantages and shortcomings of the new management philosophy, to assess the impact of its introduction into the organization of work on the employee well-being and the level of social pollution in the sphere of labour relations. The case study method was used in the framework of an integrated approach, and was supplemented with an analysis of the narratives of Italian and Russian employees of enterprises operating in the information services industry. A comparative analysis of the empirical data obtained by the authors revealed the similarities and differences in the conditions and processes related to the introduction of the smart working technology into the organization of labour. The authors identified the attitude of the smart personnel in both countries to the new managerial philosophy, as well as the factors adversely affecting the quality of their working life. The scientific contribution of the research is the study and evaluation of one of the emerging phenomena of the new labour economy, which is developing in 4.0 industry and leads to the emergence of new forms of labour relations.

1. Introduction

The relevance of the research presented in the article is due to the fact that the sphere of labour relations and human resource management needs a new management philosophy based on more efficient use of labour resources in the conditions of business process digitalization. New approaches to the organization of labour should be associated, among other things, with a change in attitude to workplace and time. Despite the active spread of non-conventional and distance employment, there is still a large number of working people who are dissatisfied with various aspects of their working time and space organisation. Moreover, non-conventional employment often implies precarious labour relations between employers and employees, which allows researchers to speak about the phenomenon of social pollution as a process of damaging employee physical and psychosocial well-being as a result of the internal and external economic activities of organizations [1-3].

Smart working is a new concept, closely related to the concept of telework. Some researchers consider smart working to be an evolutionary form of teleworking with added mobility and versatility, such as schedule flexibility and a comfortable workplace – at home or in any other convenient place to work. Teleworking at home or in satellite offices, working part-time or full-time, means not only
working at a distance. The current stage of telework development involves new approaches to the structuring of working time and work space, as well as the emergence of “flexible” or “smart” employees in the organization [4].

Smart working is defined as a new management philosophy based on providing employees with freedom and flexibility in choosing the place, time and tools used in their work, in conditions of greater responsibility and accountability for results [5]. According to one of the latest studies by the Polytechnic University of Milan, the number of smart workers is currently about 300 thousand people, or 8% of Italian employees. More than 50% of large Italian enterprises use smart working, which leads to a 15% increase in labour productivity [6]. The spread of smart working or agile work in Italy is promoted by its legislation (along with telework and home-based work): Law No. 81 of May 22, 2017, covering both the public and private sectors. It is believed that smart work allows using the workforce more efficiently, giving employees more flexibility and autonomy. Smart working is defined in the law as a mode of employment, determined by the parties in a written agreement. Work can be organized on the basis of phases, cycles and goals without a predetermined working time and place, while allowing the use of technological devices. Work may be carried out partly inside the enterprise (on site), partly away from the enterprise, that is, outside the office [7].

Smart working has indisputable advantages over traditional forms of labour, with the following most often identified in the research literature [8-14]:
- increasing employee freedom and autonomy due to better organization of work and personal time;
- saving money due to lower transportation costs for employees and consumables (electricity, etc.) for companies;
- better work-life balance, which means improving the employee’s life quality and satisfaction which will contribute to increased commitment to the company;
- smart working compared to distance employment does not cause a sense of isolation among employees, since the employee communicates with their colleagues and managers for most of their working time, both offline and online.

However, the widespread use of smart working is associated with some concerns: new technologies have great potential which can be used not only for the benefit of employees, but also to their detriment. When used unwisely, it results in exploitation, burnout and the employers’ obsessive intervention in employees’ privacy. That is why for the most effective implementation of smart working, it is essential to thoroughly study the experience of employees involved in these working conditions, in order to maximize its positive aspects and reduce the risks of worsening the physical and psychosocial well-being of employees.

2. Methodology
The purpose of the research presented in the article is to study the potential of smart working to improve labour organization, encourage workers to change and improve their well-being in the workplace based on the experience of Italian and Russian enterprises.

Large enterprises operating in the field of information services, which introduced the management philosophy of smart working in a number of their structural subdivisions, were chosen as research objects. In order to identify the attitude of “smart” employees to work, their perception of professional activity (with a greater focus on goals rather than on individual tasks; on results, rather than on following the established rules and procedures), to evaluate their work behaviour related to the way they interact with colleagues, customers and other stakeholders (net-working, net-collaboration), the authors analysed the experience of employees working in the conditions of smart working.

The method of case study or case analysis developed by the Chicago School of Sociology was used for this research [15]. A case study is a type of monographic research, the object of which is one or several cases, and the research objectives are giving a detailed description of cases, their study and subsequent interpretation [16]. A case study allows analysing and understanding any processes taking place in a society, both historical and economic, based on the understanding of social life and any
phenomena, through the agents’ perceptions, while the focus of the research is on the context of the events [17]. A case study is a non-quantitative study using qualitative methods for collecting and analysing information [18]. Case study provides researchers with great opportunities to study the history of everyday life, gender and age characteristics of reality perception, as well as opportunities for qualitative research in the field of labour economics and behavioural economics. There are various approaches to the implementation of the case study method as part of an empirical study [19]. The most common are three approaches: nomothetic, idiographic, and integrated. The authors used an integrated approach based on the analysis of a single case to identify the correlations between the phenomenon (the experience of the Russian and Italian enterprises of using smart working) and the essence (the ideal model represented by the philosophy of smart working). Thus, the analysis takes into account both the unique and the general, which allows getting closer to understanding the universal mechanisms of smart working and identifying the main patterns of its implementation in the Russian Federation and Italy. The model of scientific knowledge is represented by the classical scheme: from the unique, through the individual to the universal ("unique — individual — universal"). The implementation specifics of the case study method allow focusing on both an individual and a group of individuals or a community using a variety of data collection and analysis technologies, such as life stories, documents, narratives, interviews and participant observation [20]. In this research, case study was used in conjunction with the narrative analysis of accounts based on actual employees’ experience. The narrative approach helped ensure the collection of a significant amount of data needed to achieve the study objectives, which would be difficult to obtain through quantitative research.

40 people took part in the narrative interview: 24 men and 16 women aged from 24 to 41. The narrative interviews were carried out in stages: 1) determining (together with the HR department) the number of narratives and the various profiles (segments) of employees to be involved in the study; 2) conducting the interview and encouraging the construction of a narrative that meets the objectives of the study; 3) recording the interview (audio); 4) transcribing the record; 5) categorizing and archiving the narratives (number, basic emotions, characters, keywords).

3. Results
When analysing the employee's accounts in terms of plot structure, the following items can be identified (table 1). The analysis of the narratives by the respondents’ from Italian and Russian enterprises showed the similarities in such plot elements as “Setting” and “Action”. Thus, the staff of both organizations positively describe their experience of using the smart working technology, highlighting some negative aspects, which do not affect the overall assessment of the technology, but rather are a “zone of proximal development”. It should be noted that the smart personnel of both Italian and Russian enterprises take a passive position, not feeling their responsibility for the successful implementation of smart working, either because of their own external locus of control, or because there is no real possibility to influence anything. Nevertheless, employees of the Italian company are discussing possible improvements in the application of smart working technology with management, whereas the employees of the Russian company limit their discussions to colleagues. This may indirectly indicate a lack of properly organized feedback at the Russian enterprise, as well as a low level of trust in management and even the presence of fear, or belief that "initiative is punishable." The greatest differences in the plot were revealed in the “Problem” and “Resolution” elements.

The comparative analysis clearly demonstrates that the smart working technology in the Italian company is implemented more fully and correctly, and is closer to the ideal model. The problems identified at the Russian enterprise indicate that the smart working technology is not fully implemented and to a greater extent concerns the organization of working time and the “conditional” advantage to perform a number of functional duties outside the office. All the Russian employees interviewed positively perceived the smart working philosophy, while noting that the employer did not provide them with the means for mobile communication and did not compensate their phone or Internet expenses they had to bear when working outside the office. In addition, labour relations at the
Russian enterprise are built on the basis of an informal agreement, in the absence of any legislative framework describing the specifics of work organization in the smart working mode. None of the narratives received from the employees of the Russian enterprise described any activities aimed at shaping the values and culture (personal and organizational) necessary for the development of the management philosophy under study. Some difficulties in the relationships between employees working in the traditional way and those using smart working are probably due to this.

**Table 1. Analysing the plot structure of the narratives.**

| Plot structure element | Analysis of Italian respondents’ narratives | Analysis of Russian respondents’ narratives |
|------------------------|---------------------------------------------|------------------------------------------|
| **Characters**         | narrator, colleagues, narrators’ work group VS work teams from other company’s departments, direct managers, responsible for smart working experiment (HR function), other companies (e.g. HP) and employees of other companies, narrators’ company | narrator, colleagues, who work using the smart working technology; colleagues who have no experience of working according to this scheme |
| **Setting**            | generally positive experience but with some critical points: a large number of constraints and difficulties in management and planning | positive attitude to smart working prevails, with some negative elements identified |
| **Problem**            | - limitation of time (number of days available, mandatory day distribution (home/satellite office)); - no changes in the general office layout; - problems with satellite offices (limited availability of desks, geographic coverage (not all offices are satellites)); - insufficient IT management support (desk reservation); - reduction of welfare services (no meal vouchers when you work from home); - other difficulties and constraints (difficult to plan, stressful due to rules to be respected) | - incomplete technical equipment (the company did not provide mobile phones, phone and Internet bills are not paid by the company); - absence of satellite offices; - disruptions in communication with colleagues who work using standard working schemes; - stress due to the absence of legal regulations; - difficulty in organizing their work and rest schedule by themselves; - other difficulties |
| **Action**             | narrators took no special actions except those that can be defined as discussion of the initiative with colleagues and direct managers | narrators take a passive position, limiting their reaction to discussing the initiative with their colleagues |
| **Resolution**         | - improve the smart working reservation system; - increase time and places available; - make all the work stations smart (no longer fixed / assigned location) | - introduce legislation; - improve technical equipment; - create satellite offices |

4. **Conclusion**
The following conclusion should be made: in order to achieve higher effectiveness of smart working in accordance with the strategic objectives set, it is necessary to:
- develop a set of actions aimed at changing/improving the functioning of each smart working lever (time, place, tools and technologies, organization of internal space, and culture);
- analyse the work processes and their segmentation into those that are more suitable and effective when implemented in a traditional workplace (meetings, negotiations, group work) and those that can be effectively performed in a remote mode (activities requiring concentration and attention, individual work);
- implement a targeted communication policy on the part of the enterprise to promote understanding and raise awareness of the philosophy of smart working by employees and their managers through training sessions, seminars, and interaction between different stakeholders. Therefore, the need arises to encourage proactive behaviour in employees and raise their awareness that they can be the agents in the transformation of the enterprise.

The absence of legislation in Russia regulating labour relations in a smart working environment makes for the fact that the organization of smart personnel’s labour is based solely on oral agreements between the employer and employees. It should also be noted that not all employee categories can use smart working to the same extent (qualitatively and quantitatively), which can create certain difficulties in business and informal communication between employees, contributing to the loss of connection within the team, and reduce the smart workers’ ability to meet their basic social needs. Thus, the introduction of smart working in the Russian context is fraught with the risk of increased social pollution that has an adverse effect on well-being.

5. References

[1] Pfeffer J 2010 Building Sustainable Organizations: The Human Factor Academy of management perspectives vol 24(1) pp 34–45
[2] Standing G 2014 Understanding the Precariat through Labour and Work Development and change vol 45(5) pp 963–980
[3] Fyodorova A, Katashinskikh V and Dvorakova Z 2016 Precarious employment relations as a factor of social pollution R-Economy vol. 2(3) pp 335–343
[4] Stratigea A and Giaoutzi M 2000 Teleworking and virtual organization in the urban and regional context Geography vol 14 pp 331–357
[5] Osservatorio Smart Working 2019 SMART WORKING – Cos’è, perché è importante e come praticarlo (Politecnico di Milano) https://blog.osservatori.net/it_it/smart-working-cos-e-como-funziona-in-italia
[6] Osservatorio Smart Wokring 2018 Smart Working: una rivoluzione da non fermare (Politecnico di Milano) p 1–65
[7] L 22 maggio 2017 n 81 Misure per la tutela del lavoro autonomo non imprenditoriale e misure volte a favorire l’articolazione flessibile nei tempi e nei luoghi del lavoro subordinato (Gazz. Uff. 13 giugno 2017 n 135)
[8] Chiaro G, Prati G and Zocca M 2015 Smart working: dal lavoro flessibile al lavoro agile Sociologia del lavoro p 69–87
[9] Botteri T and Cremonesi G 2016 Smart working & smart workers Guida per gestire e valorizzare i nuovi nomadi. FrancoAngeli pp 1–120
[10] McEwan AM 2016 Smart working: Creating the next wave (Routledge) p 1–288
[11] Wheatley D 2017 Employee satisfaction and use of flexible working arrangements Work, employment and society vol 31(4) pp 567–585
[12] Menshikova M 2018 Changes in work organisation in the framework of digital transformation (Roma: Aracne Editrice) p 1–188
[13] Torre T and Sarti D 2018 Into Smart Work Practices: Which Challenges for the HR Department? Working in Digital and Smart Organizations (Palgrave Macmillan, Cham) pp 249–275
[14] Picciocchi P, Bassano C, Pietronudo MC and Spohrer JC 2019 Digital Workers in Service
Systems: Challenges and Opportunities. *Handbook of Service Science* vol II (Springer, Cham) pp 409–432

[15] Park RE and Burgess EW 1924 *Introduction to the Science of Sociology* vol 574 (Chicago: University of Chicago Press) p 507

[16] Vorobyova OV, Repina LP, Lubsky AV, Mazur LN, Rumyantseva MF and Chubaryan AO 2016 *Theory and methodology of historical science* (Terminology dictionary) p 543

[17] Kozina I 1995 Features of the case-study strategy in the research of industrial relations at industrial enterprises *Sociology: methodology, methods, mathematical models* vol 5 p 6

[18] Baxter P and Jack S 2008 Qualitative case study methodology: Study design and implementation for novice researchers *The qualitative report* vol 13(4) pp 544–559

[19] Kiblitskaya MV and Masalkov IK 2003 *Methodology and design of case study research* (International University of Business and Management) p 287

[20] Yin RK 2017 *Case study research and applications: Design and methods* (Sage publications) p 352

**Acknowledgments**

This work was supported by Act 211 Government of the Russian Federation, contract № 02.A03.21.0006; Russian Foundation for Basic Research (RFBR) under Grant № 19-010-00705 ‘Development of tools for assessing the impact of social pollution of labour relations on the employees' well-being in a digital economy’.