# Digitalization of Labor Relations

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**Abstract.** This paper presents the results of polling employees of Russian state-run and private enterprises and companies on such topic as digitalization of labor relations. Respondents were asked about the pros and cons of a paperless office, digital workplaces and remote work, which, being the attributes of innovative digital economy, reshape and redefine the employer-employee relations. The survey also revealed the respondents' opinion on who of the parties in labor relations could benefit more from digitalization, whether it could result in employee discrimination on the basis of digital skills, and whether responsibility for the acquisition of such skills lay with the employer or with the employee. The respondents were also asked whether digitalization could affect productivity and pay, the employment of retired persons or that of those approaching their retirement. The paper details and analyzes the replies from the respondents on different levels, be it top or middle managers, grassroots managers, and rank-and-file employees. The results presented herein are preliminary and do not constitute a complete analysis of how digital technology could affect labor relations.

## 1. Introduction

Digitalization transforms business processes, reshapes and redefines labor, redraws the boundaries of state-of-the-art production, distribution, exchange, and consumption. This opens up endless opportunities for novel products and services, processes and methods to emerge. Aggressive innovation alters labor relations to enable the worker to fully utilize their potential while the employer provides such an opportunity [1].

However, quantitative and qualitative evolution of the labor economy of companies and enterprises, the transformation of workplaces, the evolving HR management system, and the production upgrades are associated with explicit and latent risks and may represent a challenge to employers and employees alike, which is why all of the above aspects are subject to theoretical and empirical analysis [2].

## 2. Materials and methods (model)

Research has been carried out in 2019 to find what employees and employers know on the effects of digitalization on labor relations; it involved 116 employees of Russian private and state-run enterprises and companies. The survey used 22 questions, responded by email or phone. Respondents showed their keen interest in the survey and its results.

The breakdown was as follows: 19% men, 81% women; 69% working in private sector, 26.7% for state-run enterprises, 4.3% couldn't answer; 61.2% were rank-and-file employees, 6.0% were top

managers, 14.7% were middle managers, 14.7% were grassroots managers, 3.4% couldn't specify their status.

## 3. Results and discussion

Q: Do you agree digital technology reshapes employer-employee relations? A: 71.6% 'rather agreed', 11.2% 'rather disagreed', 17.2% couldn't answer. Q: Do you think digitalization-induced changes in labor relation will affect technical aspects only or redefine such relations in general? A: 59.5% believed digitalization would affect technical aspects only, a quarter (25.8%) thought the relations would be redefined, 14.7% couldn't answer.

We believe such distribution indicates not all of the respondents had full understanding of the scale, on which digitalization could globally affect different aspects of labor. This applies to labor tools, means, procedures, and job descriptions, to the entire system of employer-employee relations. However, digitalization will first of all affect the actors in labor relations.

The rapid advancement and aggressive deployment of ICT in all areas of public life, mainly in the economy, requires the today's users to have certain skills and state-of-the-art experience with technology [3]. At the same time, the employee, being a carrier of knowledge, skills, and professional experience, becomes central to the new digital economy, in which the productivity and efficiency of a business mainly comes from human capital [4].

This requires special competencies and skills from employees and employees alike; as such, it first of all necessitates highly professional computer and information skills.

Digital skills are defined herein as well-trained, deeply entrenched procedures of using digital devices, communication applications, and networks that provide access to, and control of, information. Digital skills include efficient use of various state-of-the-art computer tools; confident use of software and hardware to search, retrieve, copy, interpret, and exchange digital data; digital data analysis; creation and application of computational means to process sectoral data for the purpose of decision-making; use of online means for team projects. At the same time, it's critical that employees (i) be able to develop applications, computer software, and production systems; (ii) have knowledge of robotics; (iii) know how to safely use computer technologies to protect against data loss [5,6,7].

Acquiring digital skills is a complex multifaceted process rather than a one-time act. Indeed, employees, especially older ones, tend to resist digitalization and are barely motivated to learn how to use a computer [8]. While the definition of digital competencies is by and large out of question, arranging their advancement is not so simple.

This is why the respondents were asked, "Who do you think is responsible for the acquisition of digital skills by employees: they or their employers?" 45.7% thought the responsibility lay with the employer; 37.1% said it was the employee's; 17.2% couldn't answer.

43.0% of top managers thought digital skills were the employee's concern, 28.5% assigned the job to the employer, another 28.5% couldn't answer. Meanwhile, grassroots managers mainly (53%) thought the employer must be responsible for IT training for the employees; 29.4% were adamant it was the employee's responsibility; 17.6% couldn't answer. Rank-and-files answered as follows: 43.7% of them believed the responsibility was the employer's, 39.4% that it lay with the employee, and 16.9% couldn't answer.

It may be concluded companies need an HR development strategy that provides for state-of-the-art retraining programs to adequately respond to a variety of digitalization-related challenges. Employers and their communities must encourage employees to acquire such critical knowledge. At the same time, it's necessary to review the public employment policies, to update the economic regulation mechanisms, to adjust and draft novel professional standards that focus on a competency-based approach [9,10,11].

Since employees of different age tend to be differently skilled when it comes to digital technology, there arises a risk of discrimination on the basis of technological knowledge and capacities.

The risk was clearly perceived by the respondents. Q: Do you think labor digitalization will result in a discrimination on the basis of digital skills? 71.6% 'rather agreed', 22.4% 'rather disagreed', and

6.0% couldn't answer. Interestingly, top, middle, and grassroots managers mainly thought it would: 82.4%, 82.3%, and 85.5%, respectively. Meanwhile, 64.8% of rank-and-file employees 'rather agreed', 28.2% 'rather disagreed', and 7% couldn't answer. Thus, both managers and rank-and-files (although the latter were slightly more optimistic) tended to believe digital discrimination was possible.

The same people were asked to give their view on how digitalization could affect employment in general and that of retirement-age/pre-retirement persons in particular. Q: Do you think digitalization might turn out to be negative employment-wise? A: 26.7% 'rather disagreed', 58.6% 'rather agreed', and 14.7% couldn't answer. Gender-wise, women tended to be more pessimistic (62% rather agreed, 23% rather disagreed, 16% couldn't answer). Meanwhile, 50% of men 'rather 'rather agreed', 41% 'rather disagreed', and 9% couldn't answer.

66.2% of rank-and-file employees thought digitalization of labor relations would negatively affect and threaten employment. Middle managers were in agreement with them (64.7%). However, top and grassroots managers were less likely to link digitalization to employment problems (43% and 35.3%, respectively).

Most of the respondents agreed unanimously that computerizing the economy and labor would be extremely negative for retirees/pre-retirees. 84.5% 'rather agreed' digitalization would leave such people jobless; 6.9% rather disagreed, 8.6% couldn't answer. Those who 'rather agreed' this risk could well actualize itself constituted a majority of any category: 91.5% of rank-and-file employees, 86% of top managers, 76.4% of middle managers, and 70.6% of grassroots managers. 86% of surveyed men replied persons of pre-retirement and retirement age could have difficulties finding a job in a digitalized economy; only 16% disagreed. 84% of women 'rather agreed' such people would lost their jobs, 5% 'rather disagreed', 11% couldn't answer.

Respondents' concerns are confirmed by earlier studies. In particular, one such study indicated that persons of retirement age could find it difficult to get a job in a digital economy due to a lower demand for their labor and difficulties learning caused by limited abilities or health problems [12].

Some researchers are concerned about exercising the labor rights in a digital economy. They believe workers themselves do not take action to protect their rights as they might be expected. Meanwhile, employers do not pay due attention to the challenges digitalization brings with respect to occupational health and safety, to employee qualifications and skills. In this regard, analysis into such problems effectively tasks the state to get measures in place to help retirees get or stay employed without compromising their quality of life [13].

Q: Who do you think will benefit the most from the digitalization of labor relations: the employer or the employee? 75.0% answered it would rather be the employer, 13.8% believed in employee benefits, 11.2% couldn't answer. Still, most of the managers of any level as well as of rank-and-file employees considered digitalization to be of benefit for the employer: 71.5% top managers, 82.3% middle managers, 58.9% grassroots managers, and 78.9% rank-and-files.

Aside from the likely employment-related issues and discrimination on the basis of computer skills, digitalization might carry certain risks related to labor pay. This was covered by another question: Do you think you will be paid more as a result of digitalization? Slightly more than a half of the respondents (53.4%) 'rather disagreed', 32.8% 'rather agreed', 13.8% couldn't answer. Interestingly, the distribution of answers was nearly identical for men and women. Men: 36% 'rather agreed', 59% 'rather disagreed', 5% couldn't answer. Women: 32% 'rather agreed', 52% 'rather disagreed', 16% couldn't answer.

71.5% of the top managers firmly believed digitalization would positively affect their paycheck, 28.5% didn't expect any increase in remuneration. Of middle managers, 23.5% hoped for a better pay, 58.9% 'rather disagreed' they'd be paid more. Grassroots managers were least likely to believe in a personal fiscal benefit of digitalization: 17.6% vs 82.4%.

As ICT become a major contributor to the today's businesses that seek more efficient decision-making, digital workplaces emerge. A digital workplace is one equipped with a computer that comes with special software to give the employee access to data they might need for work. As such, a digital

workplace gives rise to innovative and more productive ways to work while also making the employee more engaged and flexible. A digital workplace implies new forms of digital communication and coordination between the subdivisions and the employees of all levels in a business. It makes cooperation a part of the workflow, including support for major projects, smaller groups, and work discussions. A digital workplace integrates technologies employees use to quickly retrieve and exchange information (email, corporate and social media, HR apps, etc.); it is also prerequisite for the use of sector-specific business applications. At the same time, such form of coordination requires specific controls and connection with the business management system, as digitalization gives access to a variety of services, devices, and tools that enable employees and content to be accessible anywhere in the world.

This was reflected by another question, "Do you approve digitalizing the workplace in your company?" Responses are shown in Figure 1 below.
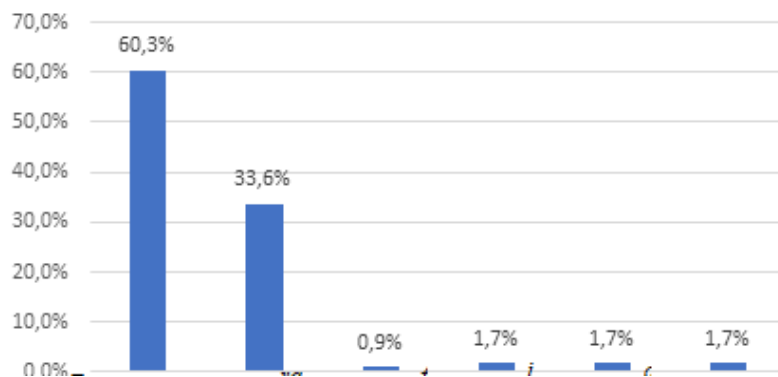


**Figure 1.** Do you approve digitalizing the workplace in your company?

Let us further dwell upon the level-specific distributions of answers. 100% of top managers 'fully approved' such digitalization. Of middle managers, 76.5% showed full approval, 17.6 'rather approved', 5.9% rather 'disapproved'.

64.7% of grassroots managers were fully for the use of computers and special software, 29.4% 'rather approved' their deployment, and 5.9% were indifferent. Answers varied more among rank-and-file employees: 52.2% 'fully approved', 40.8% 'rather approved', 1.4% were indifferent, 2.8% 'rather disapproved', and 2.8% couldn't answer.

To find out the pros and cons of a digital workplace, the respondents were asked the following questions: Figure 2 below shows the responses to the question, "What do you think are the benefits of a digital workplace?"



**Figure 2.** What do you think are the benefits of a digital workplace?

Analysis into the responses shows a digital workplace provides such major benefits as opportunities to work remotely and to find data quickly. These are undeniable, as a digital workplace provides safe and contextual access to a variety of data and applications necessary to handle the job tasks using a desktop computer, a laptop, or a mobile device anytime anywhere.

For top managers, the major benefit lied in more efficient teamwork (85.7%). Other noted advantages were quick data search (57.1%), remote work (42.8%), formalization of business processes (28.6%), greater productivity (28.6%), personalization (14.3%), transparency of work and processes (14.3%).

For 76.5% of middle managers, productivity boost was the primary benefit of digitalization. They also noted more efficient teamwork (52.9%), quick data search (47.1%), remote work (41.2%), formalization of business processes (29.4%), transparency of work and processes (23.5%), and personalization (11.8%).

Grassroots managers gave the following answers: remote work (70.6%), quick data search (70.6%), productivity boost (52.9%), formalization of business processes (41.2%), more efficient teamwork (29.4%), personalization (25.4%), transparency of work and processes (23.5%).

Remote work was the most popular advantage with rank-and-file employees (66.2%). They also noted quick data search (64.8%), productivity boost (52.1%), transparency of work and processes (32.4%), formalization of business processes (26.8%), personalization (25.4%), and more efficient teamwork (23.9%). 1.4% of respondents in this category chose 'Other'.

However, HR and business applications, email, instant messaging, corporate communications, virtual meetings and discussions, all being the mechanisms of a digital workplace, have their own cons as well; adding them to the working environment might be difficult and requires a special managerial focus.

For the question, "What do you think are the cons of a digital workplace?", the responses are shown in Figure 3 below.
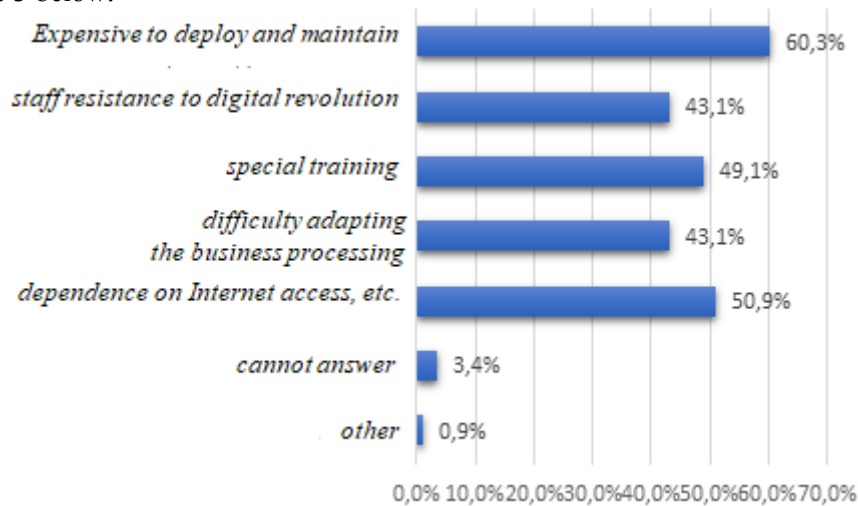


**Figure 3.** What do you think are the cons of a digital workplace?

One response that stands out in general (picked by 60.3% of the respondents across categories) is that "a digital workplace is expensive to deploy and maintain." Interestingly, other responses follow a rather smooth distribution.

For top managers, being "expensive to deploy and maintain" was the major no (100%). They also noted that a digital workplace would require special training for employees (57.1%), involve difficulties adapting the business processes to a digital system (57.1%), face resistance from the personnel (42.8%), and make the workflow dependent on Internet access, etc. (14.2%).

In their analysis of digitalization, middle managers, similarly to their top counterparts, were concerned with the costs of deployment and maintenance (64.7%), followed by personnel resistance to the

'digital revolution' (58.8%) and the necessity of special training for the staff (52.9%). 35.3% believed adapting the business processes to a digitalized environment might be difficult, while 29.4% found the workflow dependence on the Internet, etc. a major drawback.

Grassroots managers were not concerned as much about the cost of deployment and maintenance (41.2%). For them, the major cons were the dependence on Internet access, etc. (64.7%) as well as difficulties adapting the business processes to a digitalized environment (58.8%). 47.1% of grassroots managers pointed to personnel resistance, 41.2% noted the need for special training. Finally, 5.9% also checked the 'Other' option.

Notably, even for rank-and-file employees the cost of deployment and maintenance was the biggest con, as responded by 60.6%. They also noted that a digital workplace would make the workflow depend on the Internet, etc. (54.9%), necessitate retraining, (47.9%), involve difficulties adapting the business processes (40.8%), face resistance from the personnel (39.4%), and 'other' reasons (4.2%). Surprisingly, the flaws of setting up a digital workplace, i.e. retraining requirements and the necessity of a positive attitude to digitalization, both of which are the employees' direct concern, were not really emphasized by them.

A digital workplace is a state-of-the-art productivity booster that also facilitates managerial decision-making. The majority of the respondents agreed with this statement. Q: Do you believe setting up a digital workplace for you at your current employer's will boost your productivity? 73.3% 'rather agreed, 6.9% 'rather disagreed', 19.8% couldn't answer. However, 100% of top managers said it would be a booster for them. For middle managers, the figure was 82.4%; for grassroots managers, 64.7%. As for rank-and-file employees, 71.8% 'rather agreed', 8.5% 'rather disagreed', 19.7% couldn't answer.

What dictates the success of a modern digital business is its ability to have hand on the necessary data and documentation of necessary quality at necessary time in necessary location and in the most useful format to use it for optimal decision-making that yields the best results.

Paperless office is defined herein as special software designed for document management, including document creation, editing, and search, archiving, etc. Russia has great examples of a paperless office. Such systems help businesses greatly cut their costs while their employees enjoy the comfort and transparency of formalizing their labor relations. When properly made, digitally signed documents are valid for court proceedings and various inspectorates. However, a paperless office is not a widespread phenomenon [14,15].

Q: Do you trust paper-based or paperless workflow more? 77% would prefer a paperless office, 23% liked things on paper more. Meanwhile, 75% of surveyed women relied more on paper-based documentation, 18% trusted e-documents, 7% couldn't answer. However, 77% of surveyed men trusted digitized documents more, and only 23% would prefer paper.

Middle managers were more optimistic about the concept of a paperless office than their top or grassroots counterparts (76.5%). Among top and grassroots managers, support for paperless workflow was nearly identical: 71.5% and 70.6%, respectively. 67.6% of the surveyed rank-and-file employees trusted digital workflow.

The respondents were also asked to evaluate the benefits of a paperless office, see Figure 4.

Analysis shows that over a half of top managers believed the greatest effect of implementing automated document processing systems would lie in a greater productivity thanks to less paperwork (57.1%). The options 'more effective document flow management' and 'more effective performance monitoring' were each voted for by 42.8% of top managers. 'Remote access to workflows', 'immediate access to business documents', 'holistic information environment', and 'better employee discipline' were each checked by 28.5% of the respondents. Interestingly, only 14.2% of the surveyed top managers noted lesser workflow costs.

Productivity boost thanks to less paperwork was noted by 82.4% of middle managers, thus being the top response for this category. In this category, 'immediate access to business documents', 'holistic information environment', 'more efficient document flow management', and 'more efficient performance monitoring' were voted for by 35.3% each. 'Document protection' was selected by 23.5%,

'better employee discipline' by 5.9%, 'lesser workflow costs' by 17.6%, and 'remote access to workflows' by 11.8%.
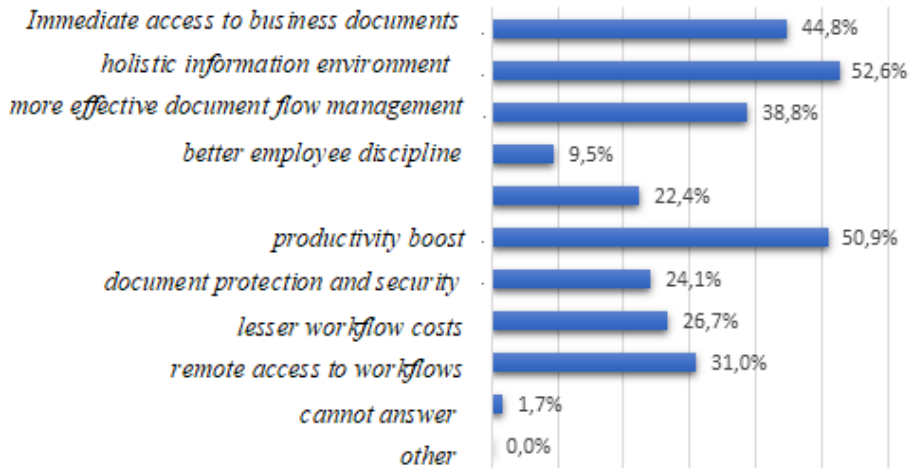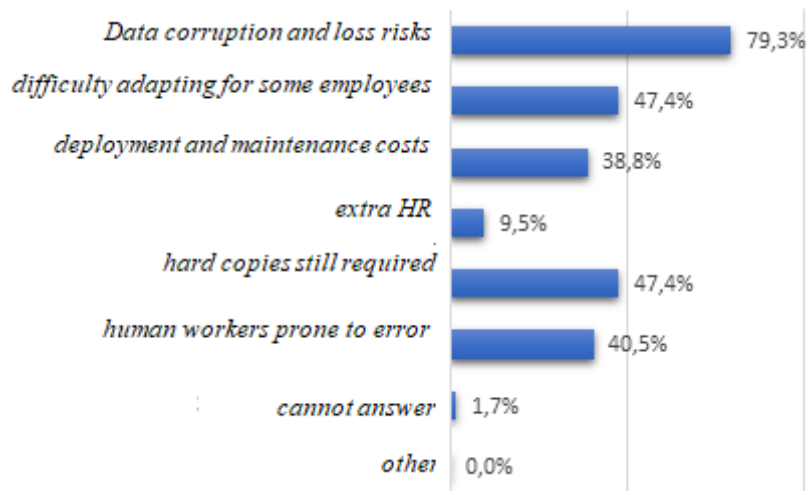


**Figure 4.** What do you think are the benefits of a paperless office?

Interestingly, holistic information environment was the most popular benefit with grassroots managers (76.5%). Nearly half of them (47.1%) also found immediate access to documents an attractive option. For grassroots managers, the pros of digitalization were more efficient document flow management (35.9%), remote access to workflows (29.4%), document protection and security (23.5%), lesser workflow costs (23.5%), productivity boost due to less paperwork (17.6%), and better employee discipline (11.8%).

For rank-and-file employees, the greatest value of an automated document management system lied in a holistic information environment (53.5%). 47.8% also voted for immediate access to business documents, 46.5% for productivity boost thanks to less paperwork. Further distribution was as follows: more efficient document flow management (33.8%), immediate access to workflows (30.9%), lesser workflow costs (25.4%), document protection and security (22.5%). interestingly, 'more efficient performance monitoring' (14.1%) and 'better employee discipline' (4.2%) were not as popular options.

Like any IT-based innovation, a paperless office is not without weaknesses. This was why there was a question on cons, too. Response distribution is shown in Figure 5 below.



**Figure 5.** What do you think are the cons of a paperless office?

All the managers noted the most important con was the risk of data loss or corruption: 85.7% of top managers, 82.4% of grassroots managers, 70.6% of middle managers. Rank-and-files agreed on this: 80.3%.

Top managers also noted the following cons: some employees might find it difficult to adapt to digital workflow; deployment might be costly; e-documents still must also be present in hard copies; employees tend to err. Each of these responses was given by 42.8% of the respondents in the category. Interestingly, top managers were least concerned about creating another job to manage the system (14.2%).

For 41.2% of the surveyed middle managers, the cons were that some employees might find it difficult to adapt to digital workflow and that e-documents still must also be present in hard copies. About a third of them (29,4 %) worried about the costs of acquisition and deployment, another third were afraid workers might err. Only 11.8% thought that hiring extra staff to manage the system was a major flaw

Slightly more than a half of the grassroots managers (52.9%) noted that e-documents must still also have hard copies For 41.2% of the respondents, difficulties adapting and proneness to error were the inevitable evil. Costly acquisition and deployment worried only a third (29.41%), extra HR to manage the system was a concern for 11.4%, and 5.9% couldn't answer.

Rank-and-file employees understood that some of their colleagues might have difficulties adapting to digital workflow, as noted by 50.7%. Further distribution was as follows: 45.1% noted significant costs of acquisition and deployment, 42.3% pointed to the necessity of paper-based copies, 40.8% focused on human error, 4.2% emphasized the extra HR to manage the system, and 4.2% couldn't answer.

Q: Do you think state-of-the-art paperless office and digital workflow prevent leakage of personal, financial, and other data? 34.5% 'rather disagreed'. Another 34.5% 'rather agreed', 9.5% 'definitely disagreed', 7.8% 'definitely agreed', 13.8% couldn't answer.

Analysis into response breakdown by category shows the responses were diverse. Thus, top managers tended to 'definitely agree' (14.3%) or 'rather agree' (42.8%) that paperless office and digital workplaces could prevent personal data loss. 28.6% 'rather disagreed', 14.3% 'definitely disagreed'.

Middle managers, as opposed to the top manager, are less optimistic about the security of a digitalized environment: 5.9% 'definitely agreed' it sufficed for protection, 17.6% 'rather agreed', 47.1% 'rather disagreed', 11.8% ' definitely disagreed', 17.6% couldn't answer.

Grassroots managers responded as follows: 11.7% believed digitization of documents and deploying digital workspace would definitely prevent unauthorized access to data, 41.2% 'rather agreed', 41.2% 'rather disagreed', 5.9% 'definitely disagreed'.

Finally, only 5.6% of rank-and-file employees were sure digitalized information was secure, while 38.0% 'rather agreed', 31.0% 'rather disagreed', 8.5% 'definitely disagreed', and 16.9% couldn't answer.

ICT continue to reshape and redefine labor, to give rise to novel, extraordinary forms of employer-employee cooperation. Digitalization has enabled remote work, a kind of workflow that is neither time, nor location-bound. As a result, workflow organization has become more flexible and efficient [16,17,18].

Remote work occurs when the employee and the employer are at different locations and do not share office space; rather, they use computer tools to communicate. Today, a person can work remotely as a full or part-time employee, with some projects or tasks being subject to outsourcing. The former case is defined as remote work. The latter case is referred to as Internet-based self-employment or freelancing.

The authors hereof were interested whether and to which extent the respondents had experience in remote work. 68.1% did not have any such experience. 19.0% had worked remotely on the basis of a contract, also signed remotely. 6.0% (had) worked as freelancers, 6.9% couldn't answer. Thus, remote work was not a popular practice with these people.

Remote contractual work was noted by 42.9% of top managers, 17.6% of middle managers, 23.5% of grassroots managers, and only 14.1% of rank-and-file employees. Meanwhile, (former) freelancers accounted for 14.3% of top managers, 5.9% of middle managers, 7.1% of rank-and-files. None of the grassroots managers was or had ever been a freelancer.

For the question, "What do you think are the benefits of remote work?", see Figure 6. Apparently, flexible hours (82.8%), time-saving (67.2%), and lower organizational costs (40.5%) were the most popular answers.
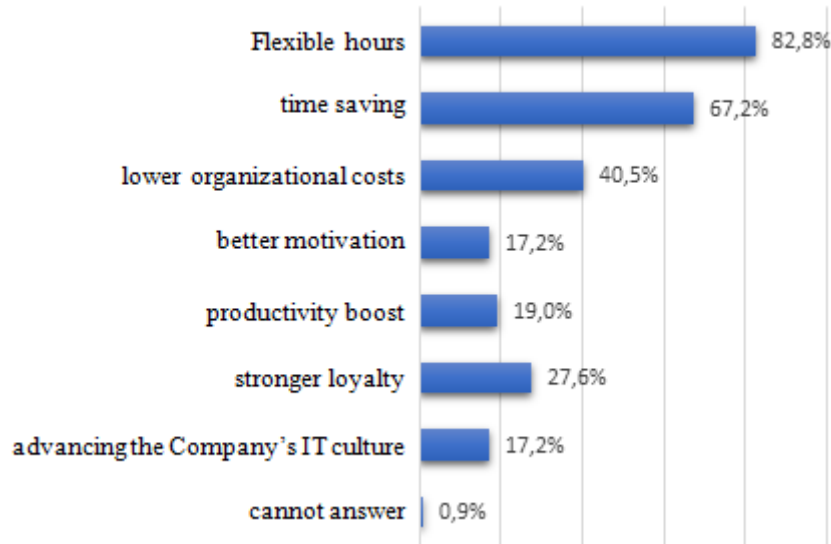


**Figure 6.** What do you think are the benefits of remote work?

For top managers, the most attractive aspects were flexible hours (100%) and saving the workers' time (86.7%). Surprisingly, only 47.1% indicated 'lower organizational costs'. 28.5% pointed to increased employee loyalty as a strong side of remote employment. Advancing the company's IT culture, productivity boost, and better motivation were each checked by 14.2% of the respondents in this category.

Similarly to their top counterparts, middle managers tended to go for flexible hours (76.5%), also noting lower organizational costs (47.1%), saving the workers' time (35.3%), productivity boost (35.3%), better employee motivation (35.3%), stronger loyalty (29.4%), and advancing the IT culture (5.9%).

For grassroots managers, the top benefits were saving the workers' time (82.4%) followed by flexible hours (64.7%). 47.1% noted stronger loyalty, 29.4% pointed to advancing the Company's IT culture. The economic effects worry rank-and-file employees less than their superiors: 23.5% mentioned lower organizational costs, 17.6% noted productivity boost. 17.6% also checked better motivation as a benefit.

A vast majority of rank-and-files valued remote work and freelancing for the flexible hours (87.3%). They also found time saving and lower organizational costs attractive (63.4% and 46.5%, respectively). Only 14.1% recognized productivity boost as an economic effect of remote work. 14.1% also appreciated the advancement of IT culture in the Company. The least popular response was the one that mentioned stronger loyalty: 12.7%.

Remote work requires specific ICT that exist in the market and are actively used by Russian and international companies alike. This includes specialized software for remote access to the employer's data; special messaging services (corporate messengers); talent management systems, TMS, that handle the training, advancement, goal attainment, skill acquisition, performance management, and career management; project and task management software; workflow systems, and corporate content management systems [19].

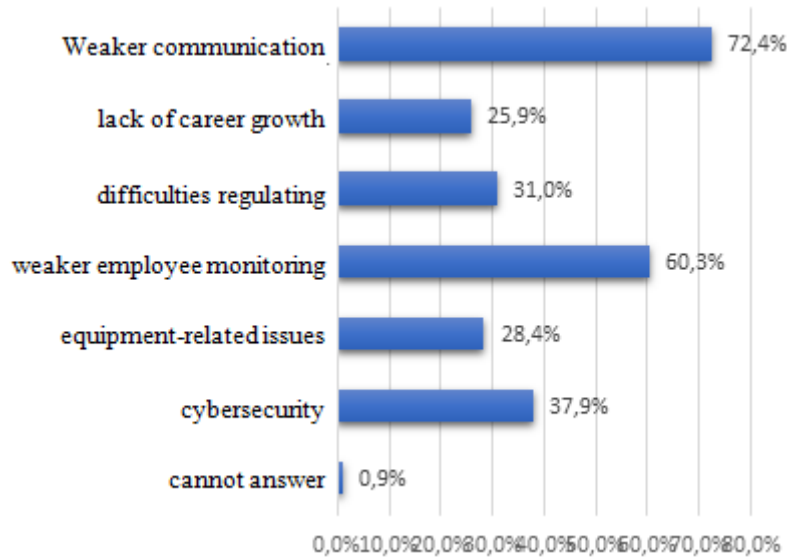Figure 7 below shows how the respondents answered the question, "What do you think are the cons of remote work?"



**Figure 7.** What do you think are the cons of remote work?

Apparently, most of the concerns were due to probable loss of personal contact at work as well as the potential difficulties monitoring the personnel.

For managers of all levels, lack of personal communication and generally less pronounced communication were problematic. This option was checked by 85.7% of top managers, 88.2% of middle managers, and 64.7% of grassroots managers. Rank-and-file employees agreed on that (70.4%).

Weaker employee monitoring and equipment-related issues were both checked by 42.8% of the surveyed top managers. 28.5% noted difficulties of regulating remote work, 28.5% had worries about cybersecurity, and 14.2% feared lack of career growth.

Middle managers were afraid of weaker monitoring of out-of-office employees (70.6%); meanwhile, regulation and cybersecurity issues were mentioned by 29.4% each. Fewer respondents pointed to equipment-related issues (23.5%) and lack of career growth (17.6%).

Weaker staff monitoring was the big problem for 70.6% of grassroots managers. Cybersecurity was a concern for 41.2%. Lack of career growth and difficulties regulating were noted by 29.4% each. These people were least concerned about the equipment-related issues (17.6%).

Over a half of rank-and-file employees worried about weaker staff monitoring (54.9%). A third (33.8%) were concerned with cybersecurity. Difficulties regulating were mentioned by 29.6%, equipment-related issues by 28.2%, and lack of career growth by 26.8%.

The problems, risks, and cons of remote work are subject matter of numerous studies, which only proves the complexity of this issue and its ambiguity in the sense of how it might affect employment. One survey of remote workers showed such work contributed to the work-family conflict due to lack of opportunity to divert from work at home [20].Another study identified such negative aspects of remote work as social and professional isolation as well as the threats of professional promotion [21]. Another representative study found that remote work was associated with better organization, satisfaction, and well-being at work. However, these are boosted by intensifying work itself and the employee's inability to get off during non-business hours [22].

## 4. Conclusion

This study is far from exhaustive; as such, it does not cover all the effects digital technologies might have on employer-employee cooperation. Nevertheless, it still reveals the most sensitive points: possi-

ble discrimination on the basis of age and digital skills; probable reduction in pay; difficulties retraining; organizational impairments; risks of data loss; unilateral benefits (for the employer only).

Still, despite some concerns, respondents across different social statuses agreed digitalization in general and a digital workplace in particular would be of benefit; they believed information-related innovation would positively affect productivity and performance of their companies.

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