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MODERN REQUIREMENTS FOR HUMAN RESOURCE MANAGEMENT SYSTEMS IN RUSSIAN COMPANIES

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Abstract

The article examines the main requirements of Russian employers for automation systems in HR and digital recruitment automation tools. The authors compare the attitude of employers to automation of different areas in the field of HR depending on the size of the company. An organizational and economic analysis of various Human Resource Management Systems (HRM Systems) is provided. The results of the study look at integrated automated HR systems with advanced functionality, such as Human Capital Management Systems (HCMS) and Work Force Management Systems (WFMS). Various tasks that can be solved with digital tools for automating workflows in the field of HR are being considered. The use of HRM systems is analyzed based on the size of the company. Examples of automation of personnel office, as well as processes of search and recruitment are given. There is a critical slight use of automation tools in staff adaptation processes as well as talent management. The authors ranked the various possibilities of the HR automation system on their necessity and importance to employers. In the conclusion of the article, the authors come to the conclusion that it is the recruitment processes that are most vulnerable to automation. The entire Russian market has a huge potential to significantly increase the automation of recruitment and HR management in general. We believe that domestic technologies will allow to create modern competitive automation products of basic HR processes in the near future.

1. Introduction

Automation of workflows using digital tools is one of the global trends in HR. Automation is subject to both search and recruitment processes and other HR management tasks: employee training and development, personnel office, talent management, calculation of rewards, compensations and benefits, management of the personnel reserve and so on. In the HR process automation tool market, there are both tools to automate specific tasks and directions, as well as integrated systems that create a unified environment for many processes in HR. tools depend on a variety of factors, including the size of the company. The article compares the requirements of Russian employers to HRM systems, offering the most comprehensive set of solutions to automation of HR processes to date. The requirements for the automation systems of recruitment, which solve the task of automating recruitment in the company, are also being analyzed (Jossi, 2001).

2. Problem Statement

- To investigate the effectiveness of HR workflow automation;
- Identify the main components and features of different recruitment systems;
- To compare the main automation tools in HR management in Russia and abroad.

3. Research Questions

The emergence of automated HR systems has allowed HR companies to significantly intensify their work. Depending on the functional content of HRM-Systems, the range of tasks to be solved may include (Weeks, 2015):

- Information service for staff, managers, HR managers;
- Communication between users;
- Data collection, analytics and reporting;
- Manage staff training processes;
- Manage hiring processes;;
- Manage employee adaptation processes
- Time tracking, managing business trips and vacations;
- Staffing;
- Managing staff efficiency;
- Maintaining the personnel reserve, managing competencies;
- Managing compensation, bonuses and benefits;
- Talent management etc.

4. Purpose of the Study

The purpose of the study is to analyze the need for the use of different HRM systems by Russian recruitment companies. It is necessary to identify a range of possible tasks that will be solved by personnel agencies through automation mechanisms. Explore the possibility of integrated applications of modern

digital automation tools in the field of HR management. Identify the potential risks of global use of automatic HRM systems as sources of internal conflicts within companies.

5. Research Methods

As the main methods of the study, the work materials of leading Russian recruitment and recruitment companies are used. The study is based on the main results of a comparative analysis of the sociological surveys of HR managers conducted by HeadHunter in 2017 and 2018. The survey data relate to the attitude of employers from among the companies present in the Russian HR market to various recruitment systems and HRM systems as automation tools in the HR field (HeadHunter, 2017).

6. Findings

Digital tools for automating workflows in HR can be made into directories based on the types of tasks it may solve. Tasks vary from specific and highly specialized (e.g. payroll) to a wide range of HR processes, including high-level tasks such as talent management or employee motivation. HRM systems are a complex tool for digital automation (and at the same time one of the most popular HR technologies in the modern market). Compared to other tools available, it allows to varying degrees to automate the largest number of HR tasks that are in principle amenable to automation at the current level of technology development.

In Russia, both HRM systems of the world's largest suppliers in the HR market (e.g. SAP or Oracle) and tools of Russian manufacturers (e.g. 1C and Galaxy) are widely represented. At the same time, Russian manufacturers of HRM systems successfully compete with foreign suppliers in the Russian market - in many assessed parameters, including the prevalence among employers and the number of functions performed, their products turn out to be comparable to the HRM systems of foreign manufacturers.

As shown below, in the first place HRM systems are in demand by large companies, which face the inability to maintain a quality level of management in the field of HR, increasing the number of employees of the HR department proportionateto the staff of the company. HRM systems provide an opportunity to unify staff work and create a single digital environment, reducing HR management costs, as well as increasing team productivity through better HR management. At the same time, smaller companies are less interested in using sophisticated and expensive automation tools, as their staff size allows for effective HR management without the use of complex systems. These companies are more likely to attract digital tools to address the most pressing HR challenges of finding, recruiting, and hiring.

Modern recruitment automation tools allow you to solve problems that go far beyond the usual recruitment accounting - they can integrate with popular recruitment sites and significantly facilitate the search for candidates and vacancy rates, improved recruitment performance through statistics and data analysis, and use chatbots and machine learning to evaluate, screen and interview candidates (Kroot, 2018).

The range of consumers of both types of digital tools under consideration varies greatly. Both HRM systems and recruitment automation systems are widespread in the Russian market. According to a survey of Russian HR managers, HRM systems as a means of automation of HR-processes are distributed in a little less than half of the companies (46%) represented in the Russian market. 11% use their own solution

developed within the company. One in five companies (20%) has plans to introduce HRM in the future, and 29% of companies do not use HRM systems and do not have plans to implement this kind of tools (Roberts, 2014).

The requirement to use the HRM system increases with the company's increase in staff. Among companies with a staff of more than 1000 people, 44% use third-party HRM systems, and another 13% use their own solution (Meade, 2001). They do not use HRM systems, but 26% of companies plan to do so. Only 11% of large organizations do not have plans. Smaller businesses are less likely to use HRM systems: among companies with up to 100 employees, only 37% (27% use a third-party product and 10% use their own). At the same time, only 12% have plans to implement such systems, and 40% do not use HRM systems and do not plan to do so in the future. Companies with an average number from 100 to 1000 people use HRM systems with an average frequency of the Russian market: 32% of third-party developers, 11% own, 19% plan to use HRM systems in the future, 36% do not use any specific ones and do not plan to do this (Roberts, 2014).

For Russian companies there are no absolute criteria for choosing an HRM system - even the necessary functionality as one of the main criteria for choosing is noted by a little more than half of the employers surveyed (53%). is the cost of the product - it is guided by 47% of companies. The flexibility of the system and the possibility of individual adjustment is important for 42% of employers surveyed. For 34% is an important opportunity to integrate with other business process automation systems (e.g. ERP systems). Inherent for only 9% of organizations paying attention to the experience of well-known companies in the use of HRM systems, and 11% - to the brand of the solution provider. Thus, local and smaller companies that supply HR automation tools get the opportunity to compete with large and international companies in this industry (as can be seen in the example of the Russian market services and products (Volini et al., 2019).

HRM systems are complex solutions for automating both different tasks and entire areas of the HR department. As the survey of Russian employers shows, the personnel business is most often automated - it is already automated in 70% of companies, and 21% plan to automate it in the future. Almost as many companies (69%) to varying degrees have automated the process of search and recruitment, with 60% going to continue to automate recruitment in the future. The calculation of salaries and bonuses is automated in 54% of companies, and only one in five companies (20%) and companies (20%) have been automated. plans to automate this process in the future (Volini et al., 2019).

Other HR processes in companies are automated much less frequently, although many of them are the objects of automation plans. Staff evaluation and development processes have been automated in 26% of companies (48% plan to automate them in the future). 21% of companies have automated staff training (45% plan to do so in the future). Companies are also not too willing to automate the HR process such as compensation and benefits calculation, with only 21% of employers doing so, with only 13% planning to do so in the future (Volini et al., 2019).

The process of staff adaptation has been automated in 16% of companies (46% plan to automate them in the future). Internal communications are also automated in 16% of companies (but plan to automate their 31% employers in the future). Only 11% of companies have been automated with a high-level HR process such as talent management (and 35% plan to automate in the future) (Volini et al., 2019).

The size of the company affects not only the degree of automation of HR processes, but also the choice of which processes need to be automated. As noted above, small companies tend to automate the most important HR processes from a business point of view more often, while big business faces the need to automate many processes in a comprehensive way and create a single digital environment HR managers. A survey of companies in the Russian market confirms this: among companies with less than 100 employees, the most commonly automated process in HR is recruitment - it was more or less automated 93% of companies. Staffing (53%) is much less likely to be automated (53%). But among companies with more than 1000 employees, personnel business is automated 80%, wages and bonuses are calculated by 66%, and recruitment processes are 60%. 100 to 1,000 people are automated in recruitment and recruitment processes, and 45% of salaries and bonuses are calculated (Volini et al., 2019).

Compensation and benefits processes are also significantly more common in larger companies, with a quarter of employers employing more than 100 people to automate them (25-26%). internal communications, by contrast, are more likely to be automated in smaller companies, 27% each in companies with up to 100 employees, 15% in companies with a staff of 100 to 1,000, and 11% in companies with more than 1,000 employees (HeadHunter, 2017).

Factors that hinder automation processes and prevent companies from implementing appropriate digital tools, including HRM systems, are primarily lack of funds and lack of tools available. In the ranking of the key difficulties that arise with the automation of HR processes, the most popular answers were "too expensive software" and "complex software integration" - they are allocated by 43% and 41% of employers accordingly. In principle, 37% of companies do not have any funds and resources to automate HR processes. For too long the implementation of automation tools complain 27% of employers. For 24% of companies, one of the key difficulties is the lack of clear metrics and results. In 23% of companies against the introduction of automation are ordinary employees or management. For 17% of companies, the main difficulty in automating HR processes is the difficulty of choosing, as there are too many players on the tool market. Only 17% of companies do not find any difficulties in the way of automation of HR processes (HeadHunter, 2017).

As part of the survey of HR managers of various companies, they were also asked to assess the importance of having certain functions in the HRM system. As a result, it was possible to rank the various capabilities of the HR process automation system as necessary and important to employers. The most important functions for companies are those that belong to the field of recruitment. Thus, automation in this area of HR-management is most often in demand on the market (James, 2002).

7. Conclusion

Among all the processes in HR, recruitment is most vulnerable to automation. When choosing process automation tools in HR, companies primarily pay attention to the functions of automation of recruitment processes. This is particularly the case for organizations with small staff, while large companies are more likely to adopt more comprehensive HR automation tools, such as HRM systems. At the same time, for many organizations, the most popular functions of HRM system are also those that are responsible for automating the solution of problems in the field of recruitment.

The Russian HR market is diverse and the choice of suitable tools requires employers to carefully assess their own capabilities and needs. At the same time, the potential of introducing automation tools for recruitment and HR management, in general in the Russian market, is far from exhausting. Many organizations still continue to use the simplest recruitment tools and remain potential consumers of recruitment automation tools (Tikhonov & Konovalova, 2019).

The prevalence of HRM systems in the Russian market also leaves room for their further expansion. At the same time, Russian HRM systems manage to compete successfully with foreign counterparts due to local advantages (e.g. rapid renewal and adjustment spree under local legislation), which provides a good chance for further development Russian HR technologies.

References

HeadHunter (2017). Almanac HeadHunter. Retrieved from https://hh.ru/article/21200 Accessed: 11.11.2019.

James, W. M. (2002). The human side: Best HR practices for today's innovation management. *Research Technology Management, 45*(1), 57-62.

Jossi, F. (2001). Get the most out of HRIS training. *HR Magazine, 46*, 121-126.

Kroot, I. (2018). Searching for an HRIS solution. *HR Focus, 75*(4), S6.

Meade, J. (2001). Big-time HRIS for smaller companies. *HR Magazine, 46*(7), 127.

Roberts, B. (2014). HR-specific standards may speed data exchange. *HR Magazine, 45*(6), 183-186.

Tikhonov, A. I., & Konovalova, V. G. (2019). The relevance and effectiveness of adaptation measures in russian and foreign companies. In V. Mantulenko (Ed.), *Eurasia: Sustainable Development, Security, Cooperation. SHS Web of Science Conferences, 71* (01001). Les Ulis: EDP Sciences. DOI: 10.1051/shsconf/20197101001

Volini, E., Schwartz, J., Roy, I., Hauptmann, M., van Durme, Y., Denny, B., & Bersin, J. (2019). Deloitte global human capital trends. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/cz/Documents/human-capital/cz-hc-trends-reinvent-with-human-focus.pdf Accessed: 11.11.2019.

Weeks, K. O. (2015). An analysis of human resource information systems impact on employees. *Journal of Management Policy and Practice*, *14*(3), 35-49.