

Application of innovative technologies for working with personnel reserve in higher education institutions of Russia and Indonesia

Aplicación de tecnologías innovadoras para trabajar con Reserva de Personal en instituciones de educación superior de Rusia e Indonesia

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ABSTRACT:

The article considers innovative technologies applied at Russian State Social University (RSSU) and State Islamic University Syarif Hidayatullah Jakarta – Indonesia (UINJKT) when working with the personnel reserve (assessment center). As the indicators of the nature of application of innovative technologies, the following ones have been chosen: the fact of the use of innovative technologies in the higher education institution when considering the issues of inclusion into the personnel reserve; whether game technologies are used in the personnel reserve; what technologies are used in the development of the personnel reserve; the nature of the application of time management in the higher education institution. The study and analysis of the nature of the application of innovative technologies in the two higher education institutions made it possible to establish that similar approaches existed for a number of indicators. More than 70% of the respondents at RSSU and UIN Jakarta noted that innovative technologies were the main ones or were often used in working with succession candidates. The Russian and Indonesian youth gave priority to gamification of the processes, while the employees of retirement age and retirees did not seek to introduce gamification into their professional activities. During the development of personnel in the personnel reserve (assessment center), it is always necessary to improve one's time management. Some significant differences have been also revealed. At RSSU, gamification in the work with the personnel reserve (assessment center) was most actively used by managers, while at UINJKT - by specialists. Among the innovative technologies, UINJKT employees mainly chose coaching and mentoring, while at RSSU - tutoring and gamification. As a result, it was concluded that it was necessary to actively use innovative technologies when working with the personnel reserve at higher education institutions in Russia and Indonesia, taking into account national peculiarities and the specificity of introducing advanced technologies into the educational process.

Keywords: personnel reserve; assessment center; innovative technologies; gamification; coaching; capacity building.

RESUMEN:

El artículo considera las tecnologías innovadoras aplicadas en la Universidad Estatal de Rusia (RSSU) y la Universidad Estatal Islámica Syarif Hidayatullah Yakarta – Indonesia (UINJKT) cuando se trabaja con la reserva de personal (centro de evaluación). Como indicadores de la naturaleza de la aplicación de las tecnologías innovadoras, se han elegido los siguientes: el hecho de la utilización de tecnologías innovadoras en la institución de enseñanza superior a la hora de examinar las cuestiones de inclusión en la reserva de personal; Si las tecnologías de juego se utilizan en la reserva de personal; Qué tecnologías se utilizan en el desarrollo de la reserva de personal; la naturaleza de la aplicación de la gestión del tiempo en la institución de educación superior. El estudio y análisis de la naturaleza de la aplicación de tecnologías innovadoras en las dos instituciones de enseñanza superior permitió establecer que existían enfoques similares para una serie de indicadores. Más del 70% de los encuestados en RSSU y UIN Jakarta observó que las tecnologías innovadoras eran las principales o se utilizaban a menudo en el trabajo con los candidatos de la sucesión. La juventud rusa e Indonesia dio prioridad a la Gamification de los procesos, mientras que los empleados de edad de jubilación y jubilados no buscaban introducir Gamification en sus actividades profesionales. Durante el desarrollo de personal en la reserva de personal (centro de evaluación), siempre es necesario mejorar la gestión del tiempo. También se han revelado algunas diferencias significativas. En RSSU, Gamification en el trabajo con la reserva del personal (centro de evaluación) fue utilizado más activamente por los administradores, mientras que en UINJKT por los especialistas. Entre las tecnologías innovadoras, los empleados de UINJKT eligieron principalmente Coaching y Mentoring, mientras que en RSSU-tutoría y Gamification. Como resultado, se llegó a la conclusión de que era necesario utilizar activamente tecnologías innovadoras cuando se trabajaba con la reserva de personal en las instituciones de educación superior de Rusia e Indonesia, teniendo en cuenta las peculiaridades nacionales y la especificidad de introduciendo tecnologías avanzadas en el proceso educativo.

Palabras llave: Reserva de personal; Centro de evaluación; tecnologías innovadoras; Gamification; Coaching; capacidad de construcción.

1. Introduction

At present, the sphere of education occupies an increasingly important place in the system of the development of society and economy, provides the dynamics of growth in the company performance indicators and competitiveness. Personnel training requires effective management based on human resources and a modern material and technical base. At the same time, it is necessary to constantly develop the potential of the organization's employees, to count on the most talented, capable and talented ones (Smilansky, 2005). It is important to continuously invest into the employees of organizations (Volchkova, & Rasskazov, 2009), predicting the order of profit gaining (Douglas *et al.*, 2008), and also predicting the dividends that can be obtained in different areas of activity (Belousova *et al.*, 2016).

In different countries, there are different approaches and names of the activities of HR managers and line managers, the essence of which is to identify prospective employees, nominate them into a certain group, with which they work purposefully for its development and further more efficient use in the business process. In Russia, this is called working with the personnel reserve, in a number of European countries, talent management, in the universities of Indonesia, the assessment center. This activity is the formation, development and use of promising employees (Bazarova, & Eremina, 2007). Currently, there is no uniform understanding of this activity, and the relation between the concepts of personnel reserve and talent management is not clear (Sears, 2003; Bykova, 2010; Bednova, 2014; Chulanova, & Mokryanskaya, 2017). Nevertheless, the essence of the activity of HR managers and line managers in this matter is often similar.

At all stages of this activity, the most qualified managers use innovative technologies, including coaching, gamification, time management, etc. (Gureva *et al.*, 2016; Werbach, & Hunter, 2015). Also, it is important to ensure the continuous development of personnel (Tsitskari *et al.*, 2017; Azevedo *et al.*, 2012), constantly increase motivation (van Loon *et al.*, 2016; Kuhl, 1987; Vroom, 1964), ensure fairness in stimulating labor (Belle, & Cantarelli, 2015), the employees' desire to reveal additional resources and talents. This is important for people working in the field of education, who constantly improve their knowledge and skills in scientific and pedagogical activities (Liu, & Perry, 2016; Cummings *et al.*, 2016; Feinberg, 2012). A great potential for the development of the education sector and the use of the personnel reserve is in the regions. Therefore, the state's task is to create conditions for attracting young people to small towns, regional higher education institutions, various organizations, agriculture with new ideas and innovative technologies (Androsova *et al.*, 2016; Makushkin *et al.*, 2016).

Positive experience of applying innovative technologies in improving the quality and effectiveness of educational activities is topical for higher education institutions. At RSSU, the use of innovative technologies in working with the personnel reserve has allowed significantly increasing the performance

indicators of the university, at UINJKT, - making a significant step towards the formation of a "World Class University".

Within this framework, the study of the order of work with the personnel reserve (assessment center), the application of innovative technologies will help to identify the most appropriate forms and methods for developing the potential of managers and academic teaching staff of higher education institutions in different countries.

2. Methods

To identify the nature of application of innovative technologies in working with the personnel reserve at higher education institutions of Russia and Indonesia, a study was conducted involving two groups: one from Russian State Social University (RSSU), the other from State Islamic University Syarif Hidayatullah Jakarta – Indonesia (UINJKT). The main research tool was the author's questionnaire, compiled on the basis of the approaches and principles of the All-Russian Center for the Study of Public Opinion (VTsIOM). The initiative survey was conducted during May-July 2017. At both universities, the questionnaire was sent to the management and academic teaching staff of all departments of the universities.

It was the university employees who participated in the survey: mainly the heads of chairs, deans of departments and their deputies, teachers; their average age was 48.3 in the case of RSSU and 47.5 in the case of State Islamic University Syarif Hidayatullah Jakarta, all with higher education. In terms of gender, the respondents were divided in favor of women (70% at RSSU).

To get more answers and increase the activity of teachers in the survey, volunteer interviewers were involved in the survey. The respondents were instructed on the procedure for completing the questionnaire.

The data obtained during the study were processed using such methods as comparative analysis, logical analysis and the methods of mathematical statistics.

As the main indicators of the use of innovative technologies in working with the personnel reserve in higher education institutions, the following ones were selected:

whether innovative technologies were used in the higher education institution when working with the issue of inclusion into the personnel reserve (assessment center);

whether game technologies were used in working with the personnel reserve (assessment center);

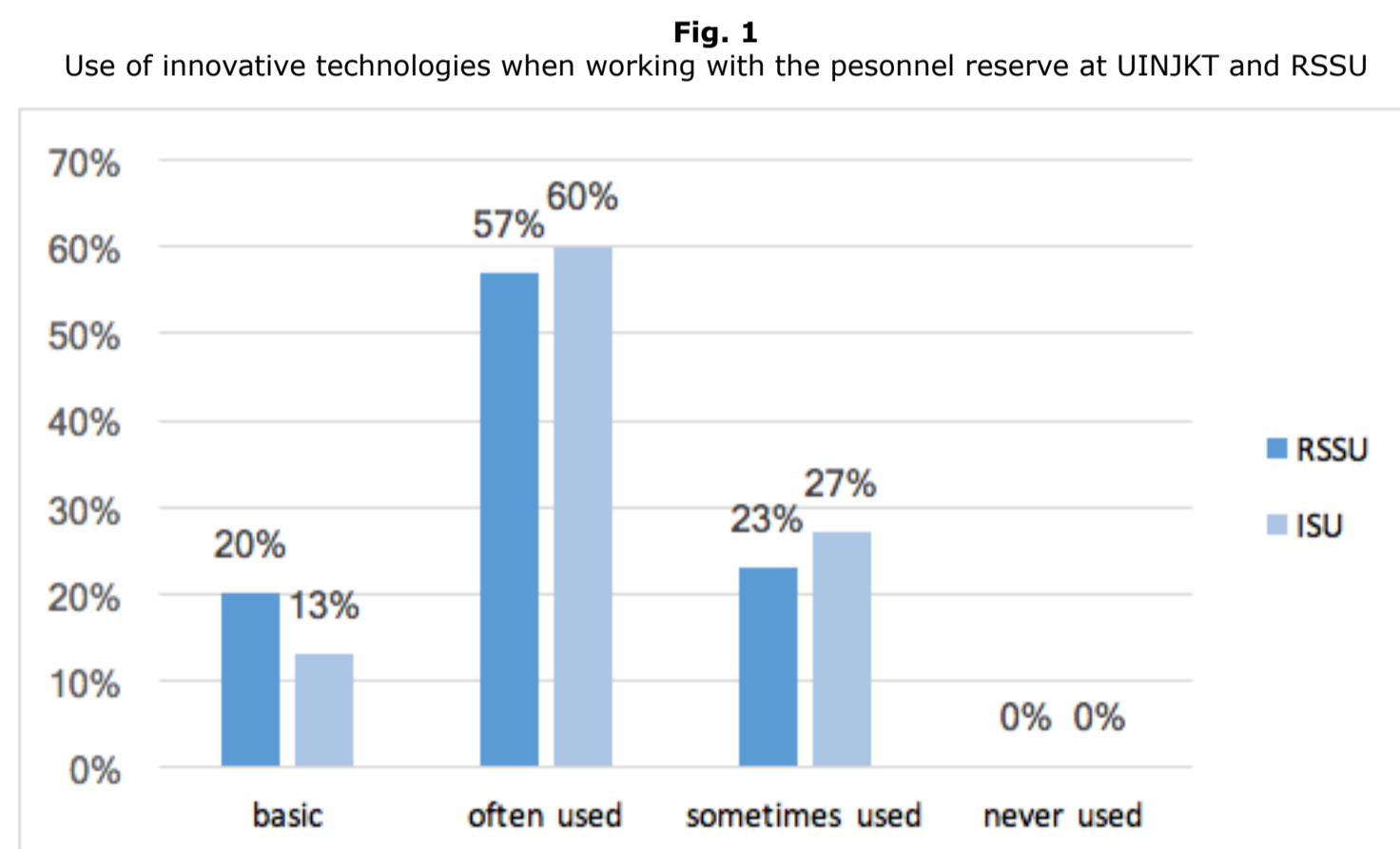
what technologies were used in the development of the personnel reserve (assessment center);

the nature of the application of time management in the higher education institution.

The obtained data were summarized, systematized and, on their basis, a comparative analysis was carried out of the state of work with the personnel reserve (assessment center) at RSSU and UINJKT, and of the nature of application of innovative technologies.

3. Results

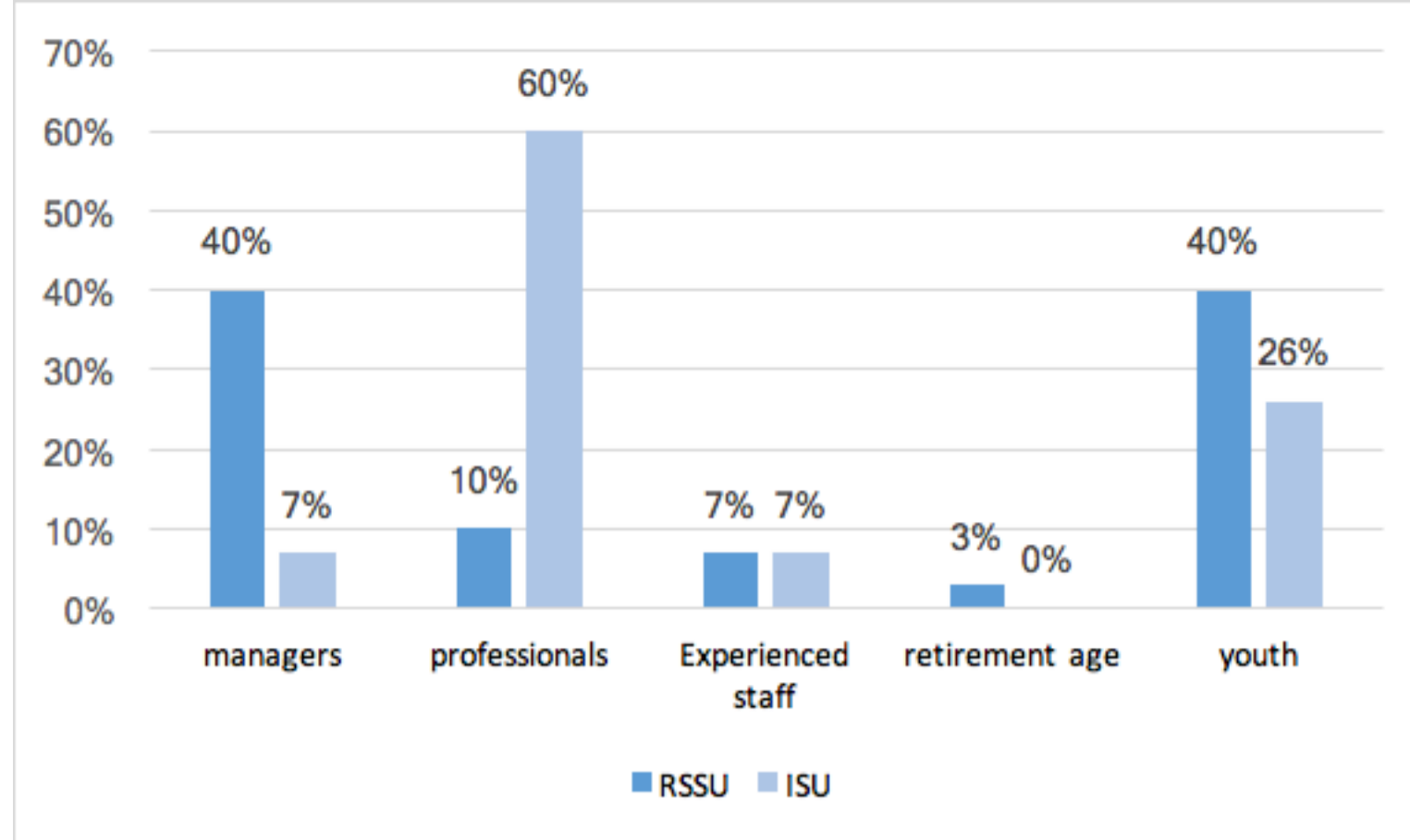
In the course of the study, it was possible to establish that innovative technologies were used while including in the personnel reserve (assessment center) at UINJKT (Fig. 1).



In most cases, innovative technologies are the main ones (13%) or often used in working with succession candidates (60% of the respondents). In the same way, at RSSU, much attention is paid to innovative technologies. 20% of the respondents noted that such technologies were the main ones and 57%, that they were often used in the work with the personnel reserve.

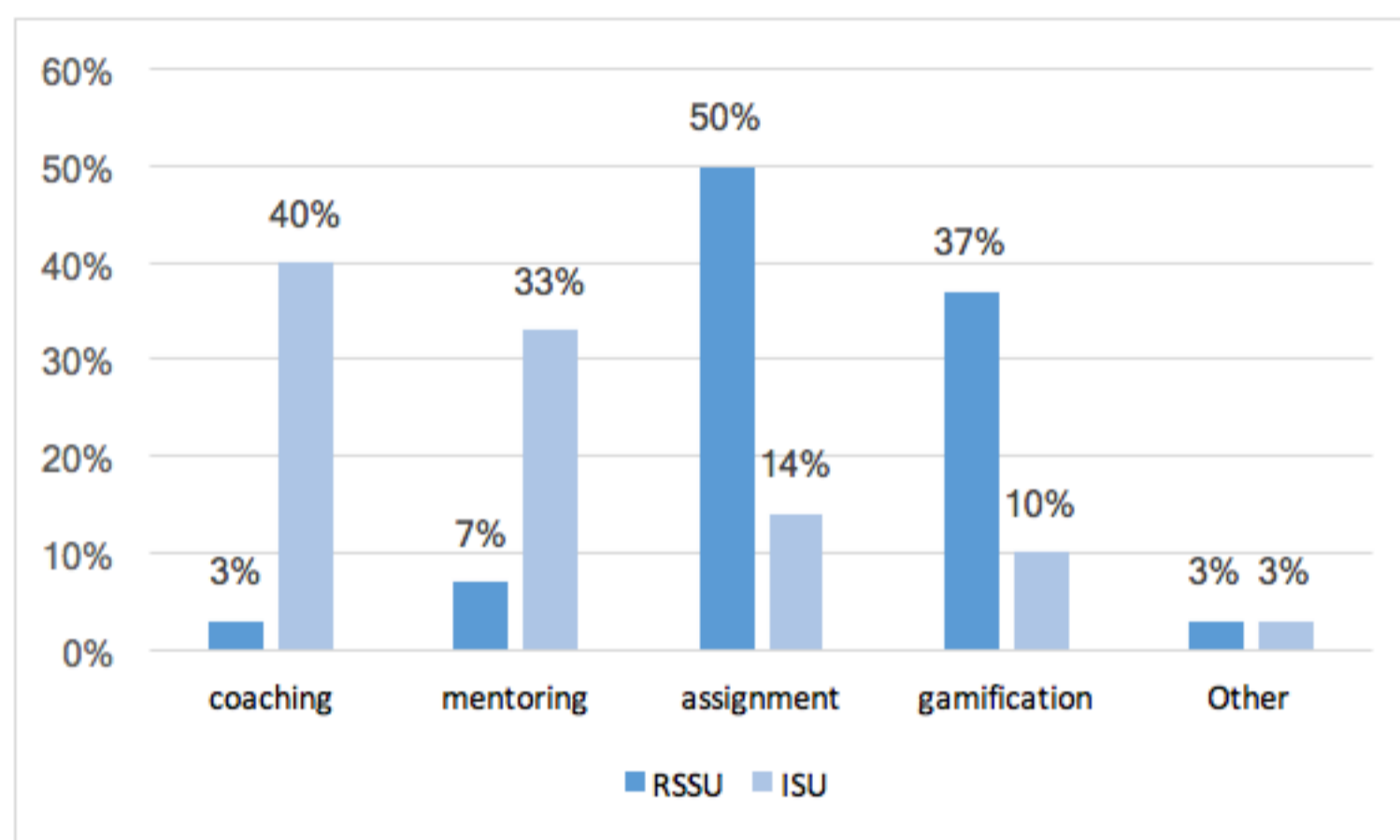
Gamification of the processes at UINJKT is best suited for specialists (60% of the respondents) and youth (26%) (Fig. 2). At RSSU, there is a slightly different picture. The gamification of the work with the personnel reserve is relevant for both managers and youth alike (40% each). Employees with experience and of the pre-retirement age (pensioners) have a reserved attitude to gamification.

Fig. 2
Gamification of the processes when working with the personnel reserve at UINJKT and RSSU



A comparative analysis of the list of innovative technologies used in the development of the personnel reserve made it possible to establish that coaching (40% of the respondents) took the leading place at UINJKT, while at RSSU, the leading place took mentoring (50% of the respondents) (Fig. 3).

Fig. 3
Technologies used in the development of the personnel reserve at UINJKT and RSSU



The second place is also asymmetric in these universities. At UIN Jakarta, it is mentoring (33% of the respondents), and at RSSU, - gamification (37% of the respondents).

The optimization of time management when working with the personnel reserve is given a lot of attention. The opinions of Russian and Indonesian teachers and leaders in this matter are in agreement: 57% of the respondents believe that, in the course of development of the personnel reserve (assessment center), it is necessary to always improve one's time management. Also, none of the respondents at both universities expressed the opinion that there was no need to optimize the time management.

4. Discussion

The development of the university system involves the use in the educational process of advanced teaching methods, the introduction of innovative technologies. This is well understood by the management and academic teaching staff of Russian and Indonesian universities; so, the best practice in working with the personnel reserve (assessment center) is being introduced. In the course of the questionnaire, it was established that innovative technologies were actively used at both research institutes when working with the personnel reserve. At the same time, more than 70% at RSSU and UIN Jakarta noted that innovative technologies were the main ones or often used in working with succession candidates.

A study of the nature of the use of gaming techniques in working with the personnel reserve (assessment center) made it possible to establish that, along with the similarity at both universities of the priority of gamification of the processes for young people, there were differences in other indicators. The most significant difference is observed in the fact that it is managers who actively use gamification at RSSU, while at UINJKT there are specialists. A typical feature for the universities being studied is that the experienced employees, pre-retirement age employees and pensioners do not seek to introduce gaming methods into their professional activities. They prefer more stable labor processes, enabling them to smoothly carry out their employment duties. On the one hand, this is good and allows achieving stable, often decent results. On the other hand, in a rapidly developing competitive environment, it leads to a lag in the effective use of human potential.

It is characteristic that at both universities no respondent noted cases when managers or academic teaching staff did not use innovative technologies. This indicates the creation of a promising, evolving system of the higher education institution based on increasing the capacity of the major part of the organization's personnel.

The study found that in Russia and Indonesia there were different approaches in the use of innovative technologies in the development of the personnel reserve (assessment center). At UINJKT, prevailed coaching and mentoring, while at RSSU, - tutorship and gamification.

As a result, we note that UINJKT gives priority to individual, pointwise identification and effective use of the potential of managers and faculty, while at RSSU more attention is paid to the established method of mentoring with the introduction of gaming techniques to a wide audience of succession candidates.

Such technologies as secondment, shadowing and buddying have not yet found wide application in the university environment.

The struggle for economical use of time in the performance of employment duties is typical for RSSU and UINJKT. All respondents are unanimous in assessing time management in the educational process. More than half of the respondents noted its importance.

This shows that, in the Russian and Indonesian pedagogical and management environments, time is valued very much, and people strive to make maximum use of working and personal time to increase the efficiency of their work and the activity of their students.

5. Conclusion

Increasing the efficiency of the organization is provided by many factors. One of them is skillful use of the human potential. Its assessment, development

and rational application occur during the formation, development and use of the personnel reserve (talent management, assessment center). Innovative technologies allow this process to become more organized, purposeful and effective. The results of the research show that in the sphere of education innovative technologies are actively used in Russian and Indonesian universities, the practice of which is shared with other participants in the educational process. The most popular are coaching, mentoring, tutorship and gamification. At the same time, significant differences in the development of personnel have been revealed. Indonesian specialists give priority to individual work with personnel, using coaching and mentoring. In Russia, more attention is paid to group activities affecting the succession candidates in the course of their development with the use of mentoring and gamification. Both approaches have their strengths and weaknesses. However, their skillful use allows developing the potential of the managing and teaching staff of higher education institutions, which has a beneficial effect on the quality of personnel training for state structures and business. Gamification is actively introduced by young people in the educational process at the universities under consideration. A difference in attitude towards gamification is revealed: at RSSU, it is more often used by managers, while at UIN Jakarta, - by specialists. Time management is in demand in Russian and Indonesian higher education institutions. It is prioritized while dealing with the issues of increasing the efficiency of the work of the personnel and the organization as a whole.

Thus, it is necessary to actively apply innovative technologies when working with the personnel reserve at universities in Russia and Indonesia, taking into account the mentality, national characteristics and specificity of introducing advanced technologies into the educational process. This will enable them to become "World Class Universities" in the near future.

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References

- Androsova, I.V., Melnichuk, A.V., Bondaletov, V.V., Vinichenko, M.V., & Duplij, E.V. (2016). On the Issue of State Support of Agriculture: Regional Aspect. *International Journal of Economics and Financial Issues*, 6(S1), 114-119.
- Azevedo, A., Apfelthaler, G., & Hurst, D. (2012). Competence Development in Business Graduates: An Industry-driven Approach for Examining the Alignment of Undergraduate Business Education with Industry Requirements. *The International Journal of Management Education*, 10(1), 2-28.
- Bazarova, T.Yu., & Eremina, B.L. (2007). *Upravlenie personalom: Uchebnik dlya vuzov* [Personnel Management: A Textbook for Higher Education Institutions] (2nd ed., revised and enlarged). Moscow: UNITY. (p. 265).
- Bednova, N.A. (2014). Innovatsionnye tekhnologii v upravlenii personalom po formirovaniyu kadrovogo rezerva. Tekhnologiya "talent management" ili "upravlenie talantami" [Innovative Technologies in Personnel Management in the Formation of the Personnel Reserve. Technology of "Talent Management" or "Talent Management"]. In *Molodezh v nauke: novye argumenty: Sbornik nauchnykh rabot I-go Mezhdunarodnogo konkursa (Rossiya, g. Lipetsk, 06 oktyabrya 2014 g.)*. [Young People in Science: New Arguments. Collection of Scientific Works of the 1st International Competition, Lipetsk, October 6, 2014] (pp. 35-38). Lipetsk.
- Belousova, A.A., Gurianov, P.A., Melnichuk, A.V., Vinichenko, M.V., & Duplij, E. (2016). Dividend Payments and Cross-country Differences in the Choice of Dividend. *International Journal of Economics and Financial Issues*, 6(S1), 46-51.
- Belle, N., & Cantarelli, P. (2015). Monetary Incentives, Motivation, and Job Effort in the Public Sector: An Experimental Study with Italian Government Executives. *Review of Public Personnel Administration*, 35(2), 99-123. doi:10.1177/0734371X13520460
- Bykova, L.A. (2010). *Kadrovyy rezerv i upravlenie talantami* [Staff Reserve and Talent Management]. Moscow: National Union of Personnel. Retrieved October 3, 2017, from <http://www.kadrovik.ru/modules.php?op=modload&name=News&file=article&sid=10831>
- Cummings, M.L., Gao, F. & F.G., & Thornburg, K.M. (2016). Boredom in the Workplace: A New Look at an Old Problem. *Human Factors. The Journal of the Human Factors and Ergonomics Society*, 58(2), 279-300.
- Chulanova, O.L. (2016). *Formirovanie, razvitie i kouching emotsionalnoi kompetentnosti v upravlenii personalom organizatsii: Monografiya* [Formation, Development and Coaching of Emotional Competence in the Management of the Organization's Personnel: Monograph]. Moscow: INFRA-M. (p. 218).
- Chulanova, O.L., & Mokryanskaya, N.A. (2017). Methodical Aspects of Improving the Development of the Personnel Reserve with the Use of Talent Management Technology. *Internet Journal of Science*, 9(2), 55.
- Douglas, J., McClelland, R., & Davies, J. (2008). The Development of a Conceptual Model of Student Satisfaction with Their Experience in Higher Education. *Quality Assurance in Education*, 16(1), 19-35. doi: 10.1108/09684880810848396
- Feinberg, W. (2012). The Idea of a Public Education. *Review of Research in Education*, 36(1), 1-22. doi:10.3102/0091732X11421114
- Gureva, M.A., Kirillov, A.V., Vinichenko, M.V., Melnichuk, A.V., & Melnichuk, Y.A. (2016). Management of Innovations and Innovative Process: Conceptual Model. *International Journal of Economics and Financial Issues*, 6(S1), 152-156.
- Kuhl, J. (1987). Action Control: The Maintenance of Motivational States. In F. Halisch, & J. Kuhl (Eds.), *Motivation Intention and Volition* (pp. 279-281). Berlin: Springer-Verlag.
- Liu, B., & Perry, J.L. (2016). The Psychological Mechanisms of Public Service Motivation: A Two-Wave Examination. *Review of Public Personnel Administration*, 36(1), 4-30.
- Makushkin, S.A., Kirillov, A.V., Novikov, V.S., Shaizhanov, M.K., & Seidina, M.Z. (2016). Role of Inclusion "Smart city" Concept as a Factor in Improving the Socio-Economic Performance of the Territory. *International Journal of Economics and Financial Issues*, 6(S1), 152-156.
- Sears, D. (2003). *Successful Talent Strategies*. New York: American Management Association.
- Smilansky, J. (2005) *The Systematic Management of Executive Talent*. London: Hydrogen.
- Tsitskari, E., Goudas, M., Tsalouchou, E., & Michalopoulou, M. (2017). Employers' Expectations of the Employability Skills Needed in the Sport and Recreation Environment. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 20, 1-9. Retrieved October 3, 2017, from <http://www.sciencedirect.com/science/article/pii/S1473837616301009>
- Van Loon, N., Kjeldsen, A.M., Andersen, L.B., Vandenabeele, W., & Leisink, P. (2016, April 6). Only When the Societal Impact Potential Is High? A Panel Study of the Relationship between Public Service Motivation and Perceived Performance. *Review of Public Personnel Administration*, 0734371X16639111.
- Volchkova, L.T., & Rasskazov, S. (2009). "Narodnye" investitsii v obshchestvennoe proizvodstvo ["Popular" Investments into Social Production: A Social and Administrative Analysis]. *Sotsiologicheskie issledovaniya*, 2, 16-28.
- Vroom, V.N. (1964). *Work and Motivation*. New York: Wiley.
- Werbach, K., & Hunter, D. (2015). *Vovlekai i vlastvui: Igrovoe myshlenie na sluzhbe biznesa* [For the Win: How Game Thinking Can Revolutionize Your Business]. Moscow: Mann, Ivanov i Ferber. (p. 224).

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