Assessing the level of adaptation of employees to the transformation processes in the company

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Abstract

In this article, the methodical principles for assessing the level of adaptation of employees to the transformational changes in the company have been improved, which are based on the construction of a five-vector map of the readiness of the company's personnel to change. This five-vector map is presented as a decomposition of the following parameters: gender-age structure, level of qualification, motivation, productivity and corporate commitment of the personnel. Each of the five parameters of staff characteristics is further described with the help of four relevant indicators. The formalization of the selected parameters is carried out by multiplicative convolution of the indicators of their characteristics, normalized by the logistic method. The proposed model allows to determine the percentage of employees' readiness for transformational changes in the company, to establish the current dynamics of adjustment of the personnel of the investigated company to the transformational changes in the economy and society relative to the previous year or the standard, to identify the necessary tools for activating the company's personnel management policy.

Introduction

The globalization processes that caused the internationalization of the activities of business entities led in the 21st century to a leveling up of the gap in the technological provision of business processes of companies from different countries of the world. The latest IT technologies are distributed almost instantly around the world and fundamentally change the processes of producing, distributing and purchasing goods and services. These transformational changes undeniably affect the company's activities and the specifics of personnel performance. Employees must not only master the process of using new automated systems of production, but also learn to work in new information, communication and financial conditions. Confirmation of the above is also the statement at the last forum in Davos of the thesis, concerning the entry of mankind into the fourth industrial revolution, which provides the minimum human intervention in the production process. At the same time, the company's personnel remains one of the main resources of the company that allows it to develop and solve new challenges. Management of the company in these conditions should ensure the creation of the necessary conditions for the rapid adaptation of personnel to the transformational changes in the company and formulate tactical and strategic decisions on the timely application of the tools of the personnel management system.

Thus, in the 21st century the worker gets into the conditions of constant change of means of labor, working conditions, and also of his/her functional duties. The effectiveness of the work in these conditions depends not only on the level of qualification, but also on the speed of adaptation to the transformational changes in the external and internal environment of the company.

Consequently, in a situation where the requirements of company management towards the employees are increased in terms of increasing the level of their performance due to faster adaptation to transformations, the main task is the quantitative calculation of the level of readiness of employees for changes and the identification of the vectors of their stimulation, as well as the strengths and weaknesses.

Literature review and discussion

A significant number of scientists only fragmentarily explores the aspects of adaptation of employees to changes within the framework of detailed research on human resource. The representative of such research

direction is Griffin R, who examines the bases of personnel management and the basic conditions for possible adaptation of workers to future changes. Jackson S. and Schuler R. consider only psychological aspects that prompt adaptation of personnel to change or vice versa reduce its level. Also, these scientists identified the tools that at the psychological level help companies management to increase the level of adaptation of their own employees to changes. Kesler G., in his own fundamental works devoted to human resource, focuses on building a gradual number of stages that employees must go through to enable the company to develop.

The next group of scientists focuses on the study of intangible tools for the adaptation of new company employees. So, Ciekanowski Z. explores the social and professional aspects of employee adaptation, and Żarczyńska-Dobiesz in his work demonstrates the importance of coaching and mentoring in the process of adaptation.

Nekoranec Jaroslav, Nagyová Lenka and Rashid Tariq M., Sohail Aslam, Muhammad in their works prove the importance of rapid adaptation of employees to changes in view of improving the effectiveness of company personnel management and the achievements of new competitive advantages of the company in the market.

The analysis of scientific publications allowed Frolenoka B. and Dukule O. to add two new aspects to the list of main issues related to the analysis of such phenomena as personnel adaptation, the working life quality, corporate culture, professional wellbeing and job-related stress. These two aspects are: the quality of the adaptation process in the company and about the connection between personnel adaptation in the workplace and the quality of working life, as well as the quality of working life and job related emotions and the possibility to differentiate between these issues from other notions that have similar contents. These notions with similar contents are seen as close notions, but still they are not identical in their meanings, hence, these are constructs (for example, participation in work, employee motivation, subjective wellbeing, life satisfaction, happiness, etc.) (Frolenoka, B., Dukule, O., 2017).

Frolenoka, B. and Dukule, O. consider adaptation to be a complex psychological process when a newly hired employee enters new professional relationships in the new environment. The nature of newly hired employee adaptation in the company has notable peculiarities: it is the time when they begin working for the first time. Professional orientation can be seen as an element of primary adaptation; orientation is a set of measures that encourages recent graduates to take decisions as well as to increase their levels of job-related motivation and the quality of working life. During secondary adaptation, which is meant for experienced employees, the adaptation usually takes less time and does not require any supervisor's help or assistance (Frolenoka, B., Dukule, O., 2017).

Niessen C., Swarowsky C., Leiz M. explored whether older employees exhibit delays in adaptation, and if so, attempted to explain why. In light of an aging workforce and changing work demands, the results of their study emphasize that organizations must shape employees' – whether young or old – job experiences in order enable them to meet new demands and to reduce the amount of time to adapt to changes. Given this finding, more intense investigation of psychological variables underlying significant job experience, and a longer time period to study the process of adaptation, are needed (Niessen, Cornelia, Swarowsky, Christine, Leiz, Markus, 2010).

Shawn Casemore supposes that most employees do not easily accept change, but now science provides further support about why this is. Fortunately, it also identifies what we can do to turn the tables. First, it is the fact that if an employee believes change is a direct result of his ideas or feedback, there is a better chance that he will accept the change. An idea someone suggests as a solution is often based on past experiences that wouldn't be offered if the experience was negative in some fashion. Second, focusing heavily on the positive impacts a change will have not for the organization, but for the employees, has the potential to allow employees to connect the positive outcome with a positive experience. For example, high productivity levels that save time can also indirectly increase revenue. If there were a profit sharing or bonus program in which this savings and profit could be shared with employees, it would be sure to provoke positive reflections. Lastly, to help employees accept change it is proved that focusing continuously on the positive benefits (rather than the risks, pitfalls, and obstacles) has a better chance at creating buy-in as a result of the positive feelings this would create in employees. (Casemore, Shawn, 2017).

Modeling of certain processes related to personnel management and prediction of its subsequent behavior at certain transformational changes in the middle of the company is presented in the works of Bechet T. and Maki W. So, these scientists build forecasts regarding the level of human resources use in the period of active development of technologies and changes in the mechanism of economic activity by companies of different forms of ownership.

It is fair to note that the above mentioned and most other scholars focus their attention on finding the optimal process control mechanism after the transformation and offer the most effective tools to overcome the problems of reducing labor productivity. At the same time, the methodical principles of quantitative assessment of personnel readiness for changes and the identification of the weaknesses of its activities in the process of transformation are fragmentary in nature.

Methodology

The essence of the proposed scientific methodological approach to assessing the level of adaptation of employees to the transformational changes in the company consists in the formation of such a set of stages of implementing the model that would solve the following problems:

➢ providing graphical interpretation of a five-vector map for staff readiness to change;
➢ calculation based on the relative indicator of coordination of the percentage of readiness of employees to change;
➢ identification of key destructive directions of displacement of the current position in comparison with the optimal option;
➢ determining the priority level of activation of unused vectors of company development.

Since the proposed approach involves a whole range of successive stages of implementation, there is a need for more detailed coverage and analysis of each of them.

The essence of the first stage is the graphical interpretation of a five-vector map of employee readiness for transformational changes in the company. This interpretation is presented as a decomposition of the following directions of personnel characteristics in a company:

➢ gender-age structure of personnel;
➢ level of personnel qualification;
➢ level of personnel motivation;
➢ level of personnel productivity;
➢ level of personnel corporate commitment.

In the context of each of the directions of the characteristics of the company personnel let us determine a set of input indicators that will allow us to comprehensively characterize and quantify it. Thus, in Figure 1, we will depict the graphical interpretation of the level of adaptation of employees to the transformational changes in the company, where we will not only represent the five vectors of the characteristics of the staff readiness process to change, but also determine the priority of the input indicators by the following rule − the closer the indicator to the center of the map, the less is its weight when forming the generalizing level of the effective indicator.
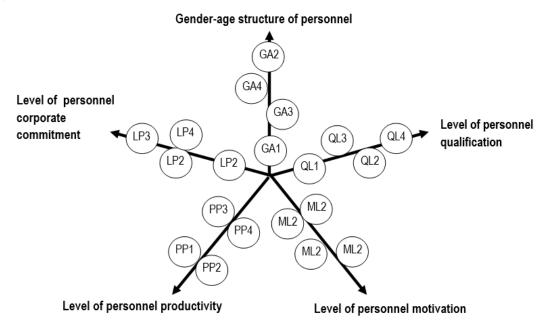

Figure 1. Graphic interpretation of the level of adaptation of employees to the transformational changes in the company

Note: GA1 and GA2 – part of women in the total number of staff and in the decision-making bodies of the company respectively; GA3 and GA4 – part of the persons up to 40 in the total number of personnel and in the decision-making bodies of the company respectively;

QL1 – part of costs for personnel skills upgrading in the total staff costs in the company; QL2 and QL3 – part of the personnel that has upgraded skills, respectively, during the last and last three years, in the total number of personnel; QL4 – availability of formalized internal company system of personnel attestation; ML1 – share of premiums in the structure of the personnel costs of the company; ML2 – ratio of average wages in the investigated company to the average market wages; ML3 – part of costs for improving the working conditions of staff in the company's total costs; ML4 – availability of a formalized internal company system of stimulation and motivation of the personnel; PP1 and PP2 – ratio of income received and expenses incurred to the number of employees of the front office of the company; PP3 and PP4 – ratio of profits to the total number of employees and the cost of the company staff maintenance respectively; LP1 – level of personnel turnover of the company; LP2 – part of management personnel of the company moved to management positions due to internal rotation of company personnel; LP3 – level of loyalty of the personal to the company (a generalized indicator on the results of the survey); LP4 – average turnover rate of one workplace of an employee of the company.

The implementation of the second stage of the proposed scientific and methodological approach consists in moving from the traditional units of measurement of rating indicators of the level of adaptation of employees to normalized values. The mechanism for implementing this step involves the use of logistic function. The advisability of this step is due to two factors:

1) need to reduce the input indicators to the interval from zero to one - the only form, regardless of the units of measurement and the peculiarities of evaluating the characteristics of each of the five vectors of the graphical description of the level of adaptation of employees to the transformational changes;

2) reflection of the logic of rational behavior of company employees in the process of making decisions on adaptation to transformational changes.

Thus, the formulas of normalization acquire the following form:

$$\tilde{GA}_i = \frac{1}{e^{-a(GA_i - GA_c)} + 1} = \frac{1}{e^{-a(GA_i - \frac{1}{2}(GA_{i\max} + GA_{i\min}))} + 1},$$

$$\tilde{QL}_i = \frac{1}{e^{-a(QL_i - QL_c)} + 1} = \frac{1}{e^{-a(QL_i - \frac{1}{2}(QL_{i\max} + QL_{i\min}))} + 1},$$

$$\tilde{ML}_i = \frac{1}{e^{-a(ML_i - ML_c)} + 1} = \frac{1}{e^{-a(ML_i - \frac{1}{2}(ML_{i\max} + ML_{i\min}))} + 1},$$

$$\tilde{PP}_i = \frac{1}{e^{-a(PP_i - PP_c)} + 1} = \frac{1}{e^{-a(PP_i - \frac{1}{2}(PP_{i\max} + PP_{i\min}))} + 1},$$

$$\tilde{LP}_i = \frac{1}{e^{-a(LP_i - LP_c)} + 1} = \frac{1}{e^{-a(LP_i - \frac{1}{2}(LP_{i\max} + LP_{i\min}))} + 1}$$

(1)

where $\tilde{GA}_i$ (respectively, $\tilde{QL}_i$, $\tilde{ML}_i$, $\tilde{PP}_i$, $\tilde{LP}_i$) – normalized value of the i-th indicator of the characteristics of each parameter (respectively, gender-age structure of personnel, level of personnel qualification, level of personnel motivation, level of personnel productivity, level of personnel corporate commitment) level of adaptation of employees to the transformational changes in the company, obtained as a result of nonlinear normalization on the basis of the use of the logistic function;

GA_i (respectively, QL_i, ML_i, PP_i, LP_i) – input value of the i-th characteristic indicator of the corresponding parameter of the level of adaptation of company employees;

a – constant, parameter that affects the degree of nonlinearity of the change of variable in the normalization interval;

$GA_{i\max}$ ($GA_{i\min}$), $QL_{i\max}$ ($QL_{i\min}$), $ML_{i\max}$ ($ML_{i\min}$), $PP_{i\max}$ ($PP_{i\min}$), $LP_{i\max}$ ($LP_{i\min}$) – maximum (correspondingly, minimum) value of the i-th characteristic indicator of the corresponding parameter of the level of adaptation of company employees;

GA_c, QL_c, ML_c, PP_c, LP_c – center of normalized intervals of change of input information in the context of each parameter of the level of adaptation of company employees.

The third stage of the implementation of the scientific and methodological approach presents the calculation of general evaluation indicators of gender-age structure of personnel, level of personnel qualification, level of

personnel motivation, level of personnel productivity, level of personnel corporate commitment, quantitatively formalized through the multiplicative form of convolution of input indicators, normalized by the logistic method:

$$GA = \sqrt[4]{\prod_{i=1}^{4} \tilde{GA}_i{}^{w_i}}, QL = \sqrt[4]{\prod_{i=1}^{4} \tilde{QL}_i{}^{w_i}}, ML = \sqrt[4]{\prod_{i=1}^{4} \tilde{ML}_i{}^{w_i}},$$

$$RP = \sqrt[4]{\prod_{i=1}^{4} \tilde{PP}_i{}^{w_i}}, S = \sqrt[4]{\prod_{i=1}^{4} \tilde{LP}_i{}^{w_i}}$$

(2)

where GA, QL, ML, PP, LP − generalizing indicators of assessment of the corresponding parameter of the level of adaptation of company employees;

w_i − weight coefficient of priority of the i-th indicator.

The fourth step is to determine the percentage of employees' readiness for transformational changes in the company. In the framework of the implementation of this stage, we will calculate the relative indicator of coordination, that is, the ratio of the absolute value of readiness of the company for changes to the optimal (maximum possible) level. The calculation of the numerator of the indicator is proposed to carry out based on the definition of the center of mass of the pentagon (Figure 2), built on five vectors, which absolute values are generalized indicators for assessing the gender-age structure of personnel, level of personnel qualification, level of personnel motivation, level of personnel productivity, level of personnel corporate commitment. We introduce the following symbols $GA = OR, QL = OT, ML = OU, PP = OZ, LP = OQ$
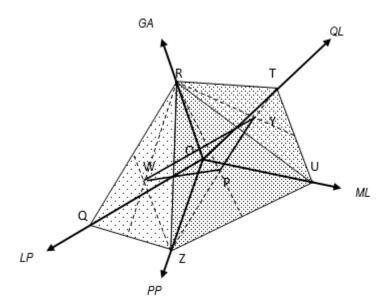

Figure 2. Geometric interpretation of the percentage of employees' readiness for transformational changes in the company

The sequence of determining the percentage of employees' readiness for transformational changes in the company implies a series of interim calculations. First, let us note that the center of the masses of the pentagon (constructed on the vectors of the indicated five parameters) is found by calculating the radius of a circle constructed around a triangle, which angles are the centers of the masses of the constituent of the indicated pentagon. So, there is a need knowing the magnitude $GA = OR, QL = OT, ML = OU, PP = OZ, LP = OQ$, to calculate:

$$
\begin{aligned}
QR &= \sqrt{QO^2 + RO^2 - 2 \cdot QO \cdot RO \cdot \cos \angle QOR} = \sqrt{QO^2 + RO^2 - 2 \cdot QO \cdot RO \cdot \cos \frac{360^0}{5}} = \\
&= \sqrt{QO^2 + RO^2 - 2 \cdot QO \cdot RO \cdot \cos 72^0} \\
RT &= \sqrt{RO^2 + TO^2 - 2 \cdot RO \cdot TO \cdot \cos 72^0}, \\
TU &= \sqrt{TO^2 + UO^2 - 2 \cdot TO \cdot UO \cdot \cos 72^0}, \\
ZU &= \sqrt{ZO^2 + UO^2 - 2 \cdot ZO \cdot UO \cdot \cos 72^0}, \\
QZ &= \sqrt{QO^2 + ZO^2 - 2 \cdot QO \cdot ZO \cdot \cos 72^0}
\end{aligned}
\tag{3}
$$

Having calculated QR, RT, TU, ZU, QZ, we consider the QRTUZ pentagon and break it into three triangles QRZ, ZRU, URT. For each of these triangles we find the center of mass (median intersection points – W, Y, P), which we match – the radius of the circle constructed around the corresponding triangle – RW, RP, RY. For the QRZ triangle:

$$
R_1 = RW = \frac{QR \cdot RZ \cdot QZ}{\sqrt{(QR + RZ + QZ) \cdot (-QR + RZ + QZ) \cdot (QR - RZ + QZ) \cdot (QR + RZ - QZ)}}
\tag{4}
$$

$$
R_1 = \frac{QR}{2 \sin \alpha_{QR}} = \frac{RZ}{2 \sin \alpha_{QZ}} = \frac{QZ}{2 \sin \alpha_{QZ}} \Rightarrow
\tag{5}
$$

$$
\Rightarrow \alpha_{QR} = \arcsin\left(\frac{QR}{2R_1}\right), \alpha_{QZ} = \arcsin\left(\frac{RZ}{2R_1}\right), \alpha_{QZ} = \arcsin\left(\frac{QZ}{2R_1}\right) \Rightarrow
$$

$$
\Rightarrow \alpha_{QR} + \alpha_{RZ} + \alpha_{QZ} = 180 \Rightarrow \arcsin\left(\frac{QR}{2R_1}\right) + \arcsin\left(\frac{RZ}{2R_1}\right) + \arcsin\left(\frac{QZ}{2R_1}\right) = 180
$$

On the basis of formulas (4) and (5) we formulate the system of equations:

$$
\begin{cases}
R_1 = RW = \dfrac{QR \cdot RZ \cdot QZ}{\sqrt{(QR + RZ + QZ) \cdot (-QR + RZ + QZ) \cdot (QR - RZ + QZ) \cdot (QR + RZ - QZ)}} \\
\arcsin\left(\dfrac{QR}{2R_1}\right) + \arcsin\left(\dfrac{RZ}{2R_1}\right) + \arcsin\left(\dfrac{QZ}{2R_1}\right) = 180
\end{cases}
\tag{6}
$$

We define the center of the masses of the triangle QRZ, the radius of the circle constructed around it $R_1 = RW$ and the unknown side of the RZ.

Similarly for the URT triangle, we define the center of mass, the radius of the circle constructed around it $R_2 = RY$ and the unknown side of the RU by solving the system with two unknowns:

$$
\begin{cases}
R_2 = \dfrac{RU \cdot RT \cdot TU}{\sqrt{(RU + RT + TU) \cdot (-RU + RT + TU) \cdot (RU - RT + TU) \cdot (RU + RT - TU)}} \\
\arcsin\left(\dfrac{RY}{2R_2}\right) + \arcsin\left(\dfrac{RT}{2R_2}\right) + \arcsin\left(\dfrac{TU}{2R_2}\right) = 180
\end{cases}
\tag{7}
$$

In the context of the next triangle ZRU, we define the center of mass, the radius of the circle constructed around it $R_3 = RP$ in the following way:

$$
R_3 = \frac{RZ \cdot RU \cdot ZU}{\sqrt{(RZ + RU + ZU) \cdot (-RZ + RU + ZU) \cdot (RZ - RU + ZU) \cdot (RZ + RU - ZU)}}
\tag{8}
$$

Having defined centers of masses of triangles QRZ, ZRU, URT, there is a need for further calculation of unknown sides WY, PY, WP:

$$(9)$$

$$
\begin{cases}
\left(\dfrac{QZ}{2}\right)^2 = \left(\dfrac{3RZ}{2}\right)^2 + RZ^2 - 3R_1 \cdot RZ \cdot \cos \angle WRZ \Rightarrow \angle WRZ = \arccos\left(\dfrac{\left(\dfrac{3R_1}{2}\right)^2 + RZ^2 - \left(\dfrac{QZ}{2}\right)^2}{3R_1 \cdot RZ}\right) \\[4ex]
\left(\dfrac{TU}{2}\right)^2 = \left(\dfrac{3R_2}{2}\right)^2 + RU^2 - 3R_2 \cdot RU \cdot \cos \angle YRU \Rightarrow \angle YRU = \arccos\left(\dfrac{\left(\dfrac{3R_2}{2}\right)^2 + RU^2 - \left(\dfrac{TU}{2}\right)^2}{3R_2 \cdot RU}\right) \\[4ex]
ZU^2 = RZ^2 + RU^2 - 2RZ \cdot RU \cdot \cos \angle ZRU \Rightarrow \angle ZRU = \arccos\left(\dfrac{RZ^2 + RU^2 - ZU^2}{2RZ \cdot RU}\right)
\end{cases}
$$

$$\Downarrow$$

$$WY = \sqrt{R_1^2 + R_2^2 - 2R_1 \cdot R_2 \cdot \cos(\angle WRZ + \angle YRU + \angle ZRU)}$$

$$PY = \sqrt{R_2^2 + R_3^2 - 2R_2 \cdot R_3 \cdot \cos(\angle YUP)},$$

$$(10)$$

$$\angle YUP = \arccos\left(\dfrac{\left(\dfrac{3R_3}{2}\right)^2 + RU^2 - \left(\dfrac{RT}{2}\right)^2}{3R_3 \cdot RU}\right) + \arccos\left(\dfrac{\left(\dfrac{3R_3}{2}\right)^2 + RU^2 - \left(\dfrac{RZ}{2}\right)^2}{3R_3 \cdot RU}\right)$$

$$WP = \sqrt{R_1^2 + R_3^2 - 2R_1 \cdot R_3 \cdot \cos(\angle WZP)},$$

$$(11)$$

$$\angle WZP = \arccos\left(\dfrac{\left(\dfrac{3R_1}{2}\right)^2 + RZ^2 - \left(\dfrac{QR}{2}\right)^2}{3R_1 \cdot RZ}\right) + \arccos\left(\dfrac{\left(\dfrac{3R_1}{2}\right)^2 + RZ^2 - \left(\dfrac{RU}{2}\right)^2}{3R_1 \cdot RZ}\right)$$

We consider the triangle WYP, for which we find the center of mass, which quantitative characteristic is the radius of the circle constructed:

$$R = \dfrac{WY \cdot PY \cdot WP}{\sqrt{(WY + PY + WP) \cdot (-WY + PY + WP) \cdot (WY - PY + WP) \cdot (WY + PY - WP)}}$$

$$(12)$$

Thus, based on formula (12), which is a sequence of the above transformations (3) – (11), let us determine the absolute value of employees' readiness for changes – the numerator of the percentage of readiness of employees for the transformational changes in the company. The next stage is the need to calculate the optimal (maximum possible) level of readiness of the company employees for changes.

Conducting the above sequence of calculations, determine the numerical value of the optimal (maximum possible) level of readiness of the company employees for changes, given that $GA = OR, QL = OT, ML = OU, PP = OZ, LP = OQ$ are equal to unit values. As a result, we get: QR, RT, TU, ZU, QZ accept values of 0.312 units r1 = r2 = 0.2213, r3 = 0.2366, RZ = 0.4427, WY = 0.4389, WP = PY = 0.3737, therefore the final value of the optimal (maximum possible) level of readiness of company employees for changes is equal to 0.2425 units.

The final stage is the establishment of destructive directions of displacement of the current position in comparison with the optimal variant and directions of the desired activation of unused vectors of the map of

adaptation of employees to the transformational changes in the company. An example of realization of this stage of the scientific and methodical approach is to be presented graphically (Figure 3).
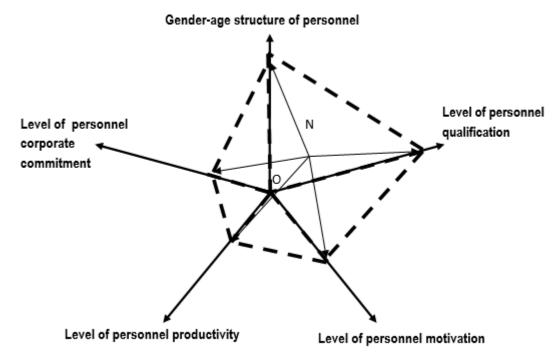

Figure 3. Geometric interpretation of the emphasis of the offset of the current position in comparison with the optimal variant and directions of the desired activation of unused vectors of the map of adaptation of employees to the transformational changes in the company.

So, the point O represents the optimal position, while the point N is the level of readiness for the changes of the company under consideration. There is a displacement in the center of the mass, that is, the magnitude of adaptation of the company employees to the transformational changes in the direction of the gender-age structure of personnel and level of personnel qualification, while insufficient attention from the company management is paid to other vectors, in particular, the level of motivation, level of productivity and level of corporate commitment of personnel.

Conclusions

The level of personnel readiness for transformational changes in the company should be calculated using the graphical formalization of such integral parameters as gender-age structure of the company personnel, level of personnel qualification; level of motivation, level of productivity and level of corporate commitment of the company employees. This formalization allows solving three main issues of the personnel management system: first, to establish the quantitative current value (in percent) of the level of readiness of personnel for changes; second, to find out the potential opportunities to improve the level of adaptation of existing personnel to changes, since the reference value is determined; third, to identify the weaknesses and strengths of the personnel currently workening in the company. All of the above mentioned allows the management of the company to take effective strategic management decisions regarding the application of various tools of HR policy.

So, based on the results of the proposed scientific methodological approach, within the framework of management of gender-age structure of personnel, the management of the company can come to conclusions regarding the efficiency of women's work, as well as the rationality of their managerial decisions. In addition, based on the results obtained, the situation regarding the effectiveness of the work of employees over 40 years old will be understandable. Thus, the management of the company can come to the conclusion regarding the reduction / increase in the number of women in the company and its management bodies, as well as determine the optimal age structure for a certain period of time of the company activity. Based on the results of the "Level of the company personnel qualification" direction, the company management is able to assess the efficiency of the spent financial resources to improve the skills of employees. In addition, the assessment of the level of adaptation of personnel to changes, within this direction, focuses on the period of skills upgrading, which gives an opportunity to make conclusions about the required frequency of this process. Sufficiently important is the possibility of assessing the appropriateness of using an internal attestation system in the company, which allows to determine the level of

training of employees both after the skills upgrading period and in general. The motivation direction of the study of the level of adaptation of company personnel to changes allows establishing the relationship between financial incentives for staff and their ability to change. The ability to make a conclusion on the degree of adaptation of personnel, depending on material incentives, enables management to build a further vector of application of tools for personnel management, i.e. whether to increase material incentives for better and faster adaptation, or to apply other leverage of influence. It is fair to note that the following two directions "personnel productivity" and "level of personnel corporate commitment" reflect, in their majority, the "reaction" of employees' activities, which is expressed in the volume of the company's wealth and trust in it. From the point of view of the process of employees adaptation to changes, these areas give an opportunity to determine the level of effectiveness of the applicable tools of personnel management.

In parallel with the above mentioned, we note that the developed scientific and methodological approach to assessing the level of adaptation of company personnel to transformations is universal and can be used to assess the readiness of employees of enterprises of any form and direction of activity. Certain minor adjustments should be subject only to indicators of the characteristics of the level of personnel productivity, since they describe the income and expenditure part of the companies that can be characterized depending on the type of activity in different categories (for example, for a bank – deposits and loans, for an enterprise – income and expenses, for an insurance company – gross premiums and gross payments, etc.).

Further research will be aimed at practical assessment of the level of adaptation of employees of different companies to changes; identification of sources of improvement of the personnel management system at various stages of structural transformation of the economy and social sphere; developing a system of personnel management tools for different companies depending on the stages of economic development.

References

1. Bechet, T. and Maki, W. (2002). Modeling and forecasting: focusing on people as a strategic resource, *Human Resource Planning, 10*(4), 209-217.
2. Brush, M. and Ruse, D. (2002). Driving strategic success through human capital planning: How corning links business and HR Strategy to improve the value and impact of its HR function, *Human Resource Planning,* 28.1, 49-60.
3. Casemore, Shawn (2017). Science Unlocks Secrets to Helping Employees Adapt to Change, *Industry Week.* Available at http://www.industryweek.com/change-management/science-unlocks-secrets-helping-employees-adapt-change.
4. Ciekanowski, Z. (2012). The socio-professional adaptation process of new employee. *Scientific Papers of Siedlce University of Natural Sciences and Humanities*, 94.
5. Devaro J. (2005). Employer recruitment strategies and the labor market outcomes of new hires, *Economic Inquiry, 43*(2), 263-282.
6. Ebadan, G. and Winstanley, D. (2002). Downsizing, delayering and careers – The survivor's perspective, *Human Resource Management Journal*, *7*(1), 79-90.
7. Eisenhardt, Kathleen M. and Jeffrey, A. Martin (2000). Dynamic capabilities: What are they? *Strategic Management Journal,* 21, 1105-1121.
8. Frolenoka, B., Dukule, O. (2017). Personnel adaptation in the workplace, the quality of working life and subjective well-being, *Information Technologies, Management and Society, 10*(1), 7-12. Available at http://www.isma.lv/FILES/SCIENCE/Publications/ITMS/2017/02_ITMS_2017_Frolenoka_Dukule.pdf.
9. Gajda, Joanna (2015). Social and professional adaptation of employees as a main factor in shaping working conditions, *Journal of US-China Public Administration, 12*(10), 789-795. Available at http://www.davidpublisher.com/Public/uploads/Contribute/56c2c6af632c2.pdf.
10. Griffin, R. (2005). Fundamentals of organizational management. Warsaw: Polish Scientific Publishers.
11. Hernandez, V. and Franklin, G. (2004). Human resource management basics: Small versus large firm practices, Proceedings CD, Association for Small Business & Entrepreneurship, pp. 61-75.
12. Hong, Liew Chai and Kaur, Sharan (2008). A relationship between organizational climate, employee personality and intention to leave, *International Review of Business Research Paper, 4*(3), 1-10.
13. Huang, J. L., Ryan, A. M., Zabel, K. L., & Palmer, A. (2014). Personality and adaptive performance at work: A meta-analytic investigation. *Journal of Applied Psychology*, *99*(1), 162.
14. Jackson, S. and Schuler, R. (1990). Human Resource Planning: Challenges for Industrial/Organizational Psychologists, *American Psychologist, 45*(2), 223-239.

15. Johnson, M. D., Hollenbeck, J. R., Humphrey, S. E., Ilgen, D. R., Jundt, D., & Meyer, C. J. (2006). Cutthroat cooperation: Asymmetrical adaptation to changes in team reward structures. *Academy of Management Journal*, *49*(1), 103-119.

16. Kesler, G. (2002). Four steps to building an HR agenda for growth: HR strategy revisited, *Human Resource Planning*, pp. 24-37.

17. Kouzes, J.M. and Posner B.Z. (1999). Encouraging the heart: A leader's guide to rewarding and recognizing others, *Jossey-Bass Publishers*.

18. Krohn, R. (2000). Training as a strategic investment, *Advances in Developing Human Resource*, 2, 63-74.

19. Lajara, B., Lillo, F. and Sempere, V. (2002). The role of human resource management in the cooperative strategy process, *Human Resource Planning*, pp. 34-44.

20. Milliken, F.J., Dutton, J.E., Beyer, J.M. (2002). Understanding organizational adaptation to change: The case of work-family issues, *Human Resource Planning, 13*(2), 91-107. Available at http://webuser.bus.umich.edu/janedut/Issue%20Selling/understandingorgadapt.pdf.

21. Nekoranec, Jaroslav, Nagyová, Lenka (2014). Adaptation of employees in the organization and its importance in terms of human resource management, *Management and Economics, 1*(73). Available at http://www.armyacademy.ro/reviste/rev1_2014/NEKORANEK.pdf.

22. Niessen, Cornelia, Swarowsky, Christine, Leiz, Markus (2010). Age and adaptation to changes in the workplace, *Journal of Managerial Psychology*, *25*(4), 356-383. Available at http://www.emeraldinsight.com/doi/abs/10.1108/02683941011035287.

23. Rashid Tariq, M., Sohail, Aslam, Muhammad (2011). Impact of employee adaptability to change towards organizational competitive advantage, *Global Journal of Management and Business Research, 11*(7), 8-16. Available at https://globaljournals.org/GJMBR_Volume11/2-Impact-of-Employee-Adaptability-to-Change.pdf.

24. Sagie, A., Birati, A., and Tziner, A. (2002). Assessing the cost of behavioral and psychological withdrawal: A new model and an empirical illustration, *Applied Psychology: An International Review*, *51*, 67-89.

25. Schindehutte, M., & Morris, M. H. (2001). Understanding strategic adaptation in small firms. *International Journal of Entrepreneurial Behavior & Research*, *7*(3), 84-107.

26. Siegel, B. (2005). The business case for recruitment process outsourcing, *Recruitment Enhancement Services*, pp. 6-24.

27. Stringer R., and Cheloha, R. (2002). The power of a development plan, *Human Resource Planning,* pp. 10-17.

28. Tamkin, P., Barber, L., Dench, S. (1998). From Admin to Strategy: The changing face of the HR function, *Managerial Auditing Journal*, *13*(2), 139-141. Available at http://www.emeraldinsight.com/doi/full/10.1108/maj.1998.13.2.139.2.

29. Thach, L., and Woodman, R. W. (1994). Organizational change and information technology: Managing on the edge of cyberspace. Organizational Dynamics, *23*(1), 30-46.

30. Ulferts, Gregory, Wirtz, Patrick, Peterson, Evan (2009). Strategic human resource planning in Academia. *American Journal of Business Education, 2*(7), 1-10. Available at https://files.eric.ed.gov/fulltext/EJ1052648.pdf.

31. Warr, P. (2014). Four-guardant investigation of job-related affects and behaviors, *European Journal of Work and Organizational Psychology*, 23, 342-63.

32. Warr, Peter, Clapperton, Guy (2010). The joy of work? Jobs, happiness, and you. London, Routledge, p. 190.

33. Żarczyńska-Dobiesz, A. (2008). The role of coaching and mentoring in the process of adaptation of a new employee. *Scientific Papers of the University of Economics in Wroclaw*, *24*.