

UDC 338.24:004

DOI: 10.18413/2408-9338-2018-4-4-0-6

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Introduction of platform technologies in practice of human resources management of the company

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Received 12 November 2018; Accepted 7 December 2018; Published 30 December 2018

Abstract. Nowadays, due to the highest relevance of workers' effectiveness improving and costs decreasing for any company the approach based on competencies is major. This approach increases the accuracy of projected worker's results by considering professional and psychological competencies of a worker as fundamental in all processes associated with human resources. There are following components in its basis: characteristics system of the employee's activity field, features of their internal motivation and platform technologies use. The author has developed and tested an actions algorithm to create the product for evaluation of applicant's consistency with the aimed position based on the blitz-psychogram method with the help of the Prof-Dialog platform resources. The author indicates the desirable characteristics of a certain position and presents the scales for their potential evaluation on the example of the "Project leader" psychogram. The article provides explanation of advantages of the platform technologies usage in human resources management of modern company.

Keywords: human resources management; platform technologies; behavioral competences; professional competencies; competencies approach; predisposition to activities; business effectiveness; business sustainability.

Информация для цитирования: Tasbulatova B. K. (2018), "Introduction of platform technologies in practice of human resources management of the company", Research Results. Technology business and service, 4 (4), 57-13, DOI: 10.18413/2408-9338-2018-4-4-0-6

Introduction

Revitalization of human resources of a company refers to such processes as training, rotation, attestation, and career growth. These processes are closely related with employee's motivation and their possibilities to achieve high productivity level on their working place.

Staff selection and movement principles within the company play a leading role in the boost of employee's activity at launch and further career movements based on trainings, attestation, horizontal, and vertical rotations.

This is also a critical issue from the cost savings point of view, as time and resources for additional training may be a burden for a company, if the hired person's abilities from the start do not comply with the position and/or his/ her motivation is not strong enough.

If we look at the basic factors, which define a possibility of a productive qualification and skills upgrading by an employee, his/ her achievement of high work indicators, then these factors are the individual characteristics of a human.

That is why the approach based on competencies is one of major approaches nowadays. This approach alleges necessity of professional and psychological competencies for successful role fulfillment, it may be used as a basis of all processes, related to human resources: selection, rotation, attestation etc. Advantages of this approach in strategic HRM are reflected in the increase of the precision level of employee's projects results, relying on the evaluation of his/ her personal characteristics and motivation, along with evaluation of professional knowledge and skills (Delamare, Winterton, 2005). The combination of behavioral competencies used for candidate's evaluation to fill the position or evaluation of a current employee for promotion is presented by the following criteria:

- System of characteristics of activity field in which an employee should be productive. For example, for a project manager it is a skill to express thoughts, team work, ability to suggest original ideas, ability to inspire other employees and control the process without domination etc. (Huemann, 2010);

- Specific features (or characteristics) of internal motivation of an employee to define probability of tasks' execution and achieving company's goals (Gupta, Sahoo, 2016);

- Skills of platform technologies use as a set of "partially or fully open technologies and additional assets, which are not in an ownership of a company and are not controlled by it, but can be used by companies for development of additional needed products, services and technologies" (Muegge, 2013).

Main part

Platform technologies are practically not used at a current stage of business development in Kazakhstan in spite of available Internet resources of online platforms for complex psychological diagnostic as, for example, the Russian company Prof-Dialog (ProfDialog – an Online platform for complex psychological diagnostics). The use of platform technologies will make it possible to

provide a regular professional support of all issues concerning ensuring human resources and their development. The author aims to justify the use of platform technologies in human resources evaluation in a company and show advantages of such usage for companies' effectiveness and sustainability.

The ProfDialog online platform for complex psychological diagnostics is based on such classical proven methods as:

1. MMPI (adaptation by Ph. Berezin, M. Miroshnikov) – a set of 384 questions. This method was widely disseminated and applied in sport psychology, the system of the Ministry of Internal Affairs, forensic examination, army, etc.

2. Syllogisms solution – evaluation of conceptual intelligence (with time limit).

3. The math test – a subtest «Sets of numbers» TSI R. Amthauer.

4. Raven Progressive Matrices – evaluation of imaginary intelligence (with time limit).

This method also involves verification of received data on the accuracy: it includes the so-called "lies scale".

Test results are summarized in a detailed report of each applicant. This report gives a possibility to make an evaluation of person's predisposition to definite activities, motivation structure, character specific features, stress resilience, intellectual abilities.

Test report structure:

1. Unit «Diagnostics of personality» contains defining propensities to leadership, activity and sociability, analytical nature or emotionality, organization, practicality or creativity;

2. Unit «Diagnostics of psychological features» gives a possibility to define the level of vitality, introversion, masculinity, hypochondria;

3. Unit «Character features» contains a short list of prevailed character features, such as self-sufficiency, analytical nature, categoricalness, integrity, rationalism, perseverance,

communication, ambitiousness, etc., and also a detailed description of character peculiarities;

4. Unit «System of relations» contains description of such characteristics as self-attitude, attitude to others, attitude to work;

5. Unit «Stress resilience» reflects the level of resilience to stress (low, medium and high) and text clarification of stress resilience features of tested person;

6. Unit «Intellectual abilities». Three types of intelligence are evaluated in this unit: imaginary, conceptual and mathematical. The Unit includes a graphic presentation of test results, and also a detailed description of the person's results on each type of intelligence;

7. Unit «Motivation». Defining of main motivation factors, encouraging the person to work. Indicating significant work conditions, orientation to achievements, process/result. Includes a list and a detailed description of prevailing motives of the tested person;

8. Unit «Role within team» includes the most appropriate for the tested person types of roles (Strategist, Agitator, Analyst, Inspirer etc.) and description of each type. It gives a possibility to define optimal for the person professional roles: the role of a manager or specialist, analyst or communicator, executor of entrepreneur, administrator or innovator;

9. Unit «Leadership style» contains a prevalent leadership style and the description of its characteristics;

10. Unit «Predisposition to activities» contains a list of activities and applicant's predisposition to them: high, medium or low.

The presented methodical toolkit gives a possibility to solve the following relevant issues for each modern company:

- to radically improve the quality of personnel selection by screening only talented candidates with potential to growth; defining candidates' intellectual abilities; defining candidates with different risk factors; defining psychological readiness of an applicant to work execution, his/ her activity and vitality;

forecasting loyalty and honesty of the applicant; knowing in advance applicant's character and his/ her behavioral specific features;

- to effectively evaluate the already employed workers by forecasting their growth potential and matching their abilities to any positions in the company; understanding strong and weak features of each employee; indicating possible psychological problems and finding their solutions; understanding appropriate motivation of any employee; finding the best applicant for a leader role; defining the most appropriate role for each employee;

- create best conditions for personnel development by defining development level of different competencies of employees; understanding of which competencies can be developed and which can not; understanding of cases in which an employee is needed to be developed, and in which it is better to move him to other position; finding problems impending to professional development of an employee; effective investing in human resources trainings for employees with biggest potential; controlling of employees development process and its effectiveness.

Materials and Methods. We suggest the method of the blitz-psychogram, which gives an opportunity to use resources of the Prof-Dialog platform and to develop an additional product for a firm on its basis, taking into account the specificity of that firm.

We have developed and tested the following activities algorithm within the research framework:

1 stage. A behavioral competencies test for a vacant position, presented on the platform of a specialized consulting organization, with its being tested on employees who are already effective in this organization on appropriate positions;

2 stage. Test results define specific features of a character and intelligence (abilities), behavioral competencies, internal motivation factors that are peculiar to all effective employees on this position. The evaluation of roles of an employee in a team, i.e. in a contact with other people, is given. The common features

of all these employees by qualitative characteristics are indicated in tests results (A – Motivation, B – Behavioral competencies), and by two scales (C – Character traits, D – roles within a team);

3 stage. Aggregation of leaders' results determines a values interval (for quantitative indicators) or a set of characteristics (for qualitative indicators), which is to coincide with the applicant's result. Bringing the results to the "optimal" (coincidence 100%) or "permissible" (coincidence 90%) field allows making a suggestion about sufficient degree of success of the future applicant's work on a targeted position.

Test results should serve as an objective basis

for diagnostics of applicant's consistency to an "ideal" position profile. Also, they could be used further by the Human Resources Department in defining the most effective form and type of training, constructing a career profile, horizontal and vertical rotations for this employee.

Results and Discussion. In the article, we have developed and presented the "Project leader" psychogram for project mode companies, including those that implement the projects in the field of fundamental and applied scientific researches.

The ideal applicant should have the following characteristics by cluster A among motivation factors (Table 1).

Table 1

Motivation characteristics, which should be included in the social portrait of the "project leader"

№	Characteristics	Content
1	Cognition, research	Motivation to learn, research phenomena, events, circumstances
2	Creative self-realization, freedom of self-realization	Creativity motivation associated with personal interest and emotional involving.
3	Self-actualization	Motivation to realize individual professional potential
4	Strength testing, taking a leap	Commitment to challenge yourself solving new professional tasks, desire to take over complex tasks
5	Independence	Work motivation in activity that give the possibility to avoid external influence and structure frameworks.
6	Dedication	Commitment to be useful and demanded, to be included in the activities

Note: Developed by the author

All factors will be indicated in ideal applicant's results. Certainly, some of them can be recognized as factors of the first significance level, while one or two factors can be considered as less important than the others at the discretion of a particular company.

Character features and mindset diagnostics by cluster A are presented in Table 2.

The applicant should have predisposition to a number of activities appropriate to this position under cluster C (Table 3).

In the report of analytical association these behavioral characteristics should be in-

cluded in the cluster "Activities with a high level of predisposition".

An applicant for a vacancy should have high scores by cluster D in such roles as a creator (10-8), inspirer (9-7), team worker (9-7), analyst (8-7), strategist (8-7) (Figure 1).

The qualities of a critic and administrator should be presented in an interval from 5 to 4 for a critical evaluation of a project progress and remote monitoring of the process stages.

Table 2

Potential abilities of the applicant by the mindset and character features (scale)

№	Character features	Interval		Notes
		Min	Max	Results are measured in %
1	Activity (positivism, mobility, intensity of activity, behavior, life satisfaction)	60-64	79	Excessive activity is not desirable as it leads to destabilization
2	Creativity (ability to find new, original, non-standard solutions)	55	75	Creativity level above 75 is accompanied, as a rule, by self-absorption, distance, that is not desirable for a leader
3	Dedication (tendency to stand up for his beliefs, assertiveness)	60	75	Commitment level above 75 leads to getting stuck on a target and impossibility of its adjustment
4	Complexity and profundity of thinking, interest to solution of complex problems, tasks that require the depth of analysis).	60	79	Indicator score above 79 is undesirable as the worker excessively complicates the process of project executing

Note: Developed by the author

Table 3

Activities with a high level of predisposition (behavioral competency)

№	Activities	Content
1	Active	Activity involving high proactive behavior of the subject in achieving desirable result.
2	Analytical	Activity involving necessary logic understanding of phenomena based on the information available and giving improvement recommendations
3	Research	Activity aimed at cognitive and intellectual needs' satisfaction, of which the new knowledge is the product.
4	Requiring initiative	Activity involving person's active involvement in goal achievement. It is tightly connected with person's ingenuity and entrepreneurial spirit.
5	Requiring intuition	Activity involving certain flair and acumen, intimate understanding of nature (essence) of things, ability to guess or comprehend anything circumventing rational perception.
6	Creative	Human activity, resulting in creation of original, unique values, that have never existed, discovering of new means and patterns etc.
7	Project	Activity, limited in time, aimed to achieve a predetermined outcome/ goal, creation of a definite, unique product or service.
8	Working in a team	Activity involving desire and teamwork and communication skills.

Note: Developed by the author

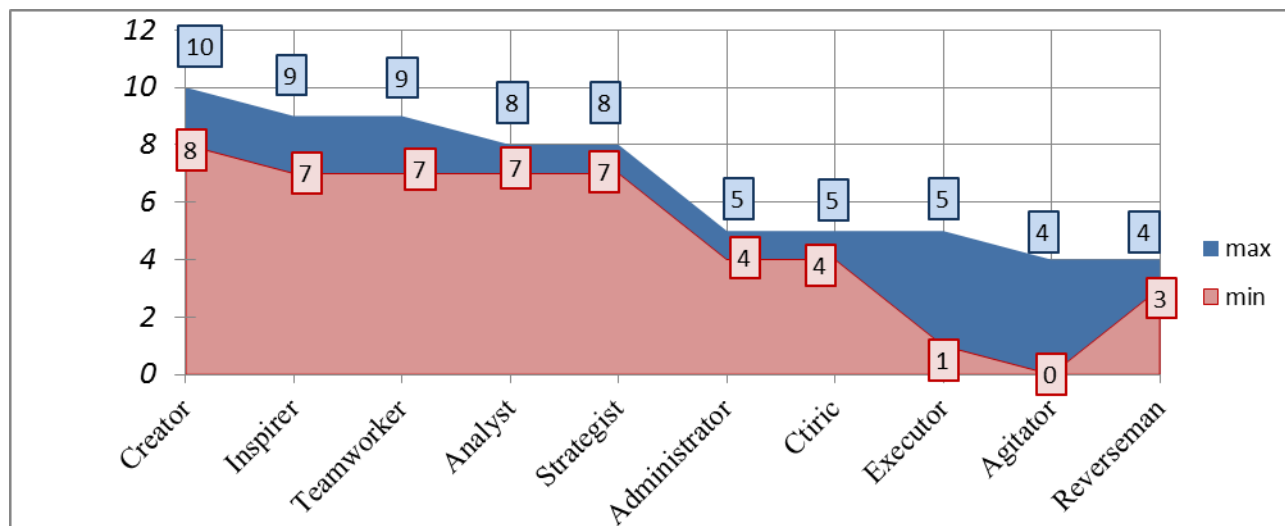


Fig. 1. Intervals of significant scales for a vacancy of a project leader role in a project team
Note: Drafted by the author

Psychological profiles of all applicants should be captured on the database, which gives a possibility to analyze a selection on separate report parts.

Certainly, specific features and development level of separate abilities indicate only predisposition to activity, coherence of an individual activity mode with typical professional activities. And the result of the applicant will show his/ her effectiveness in a definite activity and depends on personal motivation.

Conclusions

Thus, providing human resources for organization and strengthening of their activities is one of the most complex tasks for saving sustainability and competitiveness of any business. To solve the problem of human resources revitalizing it is important to use psychographic methods not only at the selection stage, but also during all their working period in the company for sustaining interest in their job performance and whole company success, as well as for preventing emotional burnout. It is advisable to accept and improve the worker's qualification with appropriate psychographic characteristics, as its effectiveness will be always higher than of a worker with-

out internal predisposition to this kind of activity.

Platform technologies give the possibility to cut costs for creation of own IT-infrastructure for human resources management in the form of a complex of tests and diagnostics, algorithms and templates of solutions. The use of online platform resources, which, as showed on the example of services of personnel selection, evaluation and development provide a qualified support of managerial decisions in human resources management. At the same time, the organization can develop their own product on the basis of platform resources as it was shown on the example of the specialist's psychogram. This product will reflect the common requirements to the worker on this position, and will take into account the specifics of the firm. It will be an instrument of prescriptive analytics in human resources management, as it will warn of possible problems in recruiting a particular applicant and, at the same time, will help in the managerial decisions development to activate human resources and ensure business sustainability.

Conflicts of Interest: the author has no conflict of interests to declare.

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