POSSIBILITIES OF BLITZ-PSYCHOGRAMS AS A TOOL FOR HUMAN RESOURCE MANAGEMENT IN THE SUPPORTING SYSTEM OF HARDINESS OF COMPANY

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Abstract. The article describes the psychogram method as a tool for human resource management. The article describes the psychogram method as a tool for human resource management, the use of which is provided by the availability of platform technologies in the modern digital economy. The presence in the market space of firms that provide platform services for complex psychological diagnosis enables the manager to adequately assess the required behavioral competencies of the applicant, using as a standard the system of basic parameters corresponding to this position. The system of basic parameters is formed on the basis of the method of blitz-psychogram after passing by professional employees of this firm professional tests based on platform technologies. This allows the company to identify the character traits, motivation, preferred activities and role in the team with efficient employees with minimal own expenses. Applicants who meet the parameters of a psychographic portrait will be internally motivated for this type of activity. This will further reduce the risk of staff turnover, increase the effectiveness of training and the effectiveness of other actions of human resources management by activating the employee's internal motivation in this type of activity.

Keywords: human resource management; psychogram; motivation; behavioral competency; platform technologies


JEL Classifications: M12

Additional disciplines: psychology

1. Introduction

The sustainability of the company is necessary to achieve its strategic goals and is based on it, including on a sufficient basis of human resources.
The company's sustainability system includes as a key element strategic human resource management (hereafter - HRM), the characteristic features of which in a modern competitive corporation are

- Functional relate from corporative strategy, which accepted in a medium or long term;
- Coordination with organizational strategies, such as cultural change, organizational changes, development of labor relations.

A multi-layered structure of HRM that performs important functions of providing resources, managing labor efficiency, managing knowledge, activating employees (Armstrong 2000, Sanchez 2010) (Figure 1). The main elements of the subsystem of activating human resources are: motivation and reward systems; development of human resources; system of relations in the company.

The activation of human resources is one of the most significant blocks of human resources management of the company, as the activities implemented within its framework have a multi-faceted impact on the rest of the functional strategies. By activation, we mean the process of influencing a worker's motivation for work with the help of a set of tools and mechanisms that stimulate the compliance of the employee's behavior and the results of his activities with the company's strategy.

The tools are: psychographic methods for diagnosing abilities, evaluation and certification, career development plan, horizontal and vertical rotation, and others (Chadwick, Dabu 2012). The mechanisms are the reward system, the adaptation mechanism of the new employee, the mechanism of participation in management, the mechanism for institutionalizing knowledge, and others (Gupta, Sahoo 2016).
Psychographic methods of diagnosing abilities are important for ensuring the stability of the company in terms of the required quality of human resources. For resources, a company can turn to the labor market and select an effective employee for a particular position. At the same time, the company can also develop the necessary qualification of an already existing employee with suitable posts by psychographic characteristics. In this case, it is necessary to correctly connect his internal motivation, in time to form in him the desire to improve the qualification of the system of remuneration for skills, to make it clear that professional competencies are a value for the company, etc. (Lengnick-Hall, Rigsbee 2013; Huemann 2010; Monni et al. 2017; Borisov et al. 2018; Bogdanović et al. 2018).

To ensure the best conditions for employee productivity, it is advisable to correctly determine the place of work, where his activity will be most productive, taking into account his psychographic data. Auxiliary facility for the activation of human resources, companies appear in the conditions of the formation of the digital economy and technological platforms (Muegge 2013).

In this article we present the results of a study of a number of Kazakhstani companies, in which we concentrated on the issue of activating human resources and the method of psychography, the use of which using platform technologies provides an effect in all development processes: selection, training, rotation, career growth.

**The aim of** the study was to develop a method of blitz-psychography for use in the practice of human resources management based on platform technologies on the resources of professional consulting companies.

**The research method** was a comparative assessment of the results of testing leaders and outsiders in specific professional groups (the total number of at least 50 people per profession) and the allocation of basic characteristics of internal competencies for professional blitz psychograms.

**Main results of the study.** The activation of the company's human resources is connected with such processes as training, rotation, certification, career growth. These processes are closely related to the motivation of the employee and his ability to achieve high levels of labor productivity in a particular workplace.

Today, human resources planning rather focuses on what skills and competencies will be needed in the future, based on the company's development scenarios, but does not provide a detailed plan for quantitative long-term staffing needs. For the company it is necessary to form a solid base of human resources, endowed with relevant qualities, skills, knowledge and training potential. The principles of selection and relocation of an employee within the company play a leading role in the starting activation of his activities and further career movements based on vocational training, certification, horizontal and vertical rotations. In terms of cost savings, this also matters, because time and resources for additional vocational training can be burdensome for a company if we initially employed a person whose abilities do not correspond to this position and/or whose internal motivation is not strong enough.

If we turn to the basic factors that determine the possibility of highly productive mastering of specific qualifications and a range of skills, achievement of high performance indicators, then they are individual characteristics of a person.

To such characteristics experts attribute several basic psychological qualities of a person:
- Human abilities, for the determination of which many classifications have been developed (Vernon 2001).
- Intellect, which in general is defined as the level of ability to think, logical reasoning, conclusions, knowledge (knowledge and comprehension) and awareness (understanding, recognition). Intellect is measured on at least three levels (low, medium, high) (Guilford 2004).

It is a specific combination of the abilities of a person and his inner motivation that underlies the formation of the level of his competence, which is the basic construction for the management of the human resources of the organization. The elements by which such a concept as "competence" is identified and described, are, in the final analysis, the basis on which actions to activate human resources are integrated.

The use of the term "competence" in the management of human resources is of a complex nature and is often identified with the notion of "competence", although there are significant differences between these concepts.

The concept of "competence" was applied in 1982 by R. Boytsis, who defined competence as "a person's ability to behave in a way that meets the requirements of working in a certain organizational environment, which in turn is the reason for achieving the desired results" (Boyatzis 1982).

Other researchers, for example, L. Spencer, understand competently the behavior of the worker (his ability to transfer his knowledge to what he does), and the competence is understood as the analysis of the functional of the work, i.e. a specific list of functions to which this profession or activity corresponds (Spencer 1993).

In modern practice, the concept of competence is most often used, as the unity of two concepts:

1) Types of behavior or the ability to behave in a certain way that the organization needs to ensure a high level of efficiency. This gives an opportunity to concentrate on personal qualities and behavioral stereotypes, desirable for performing functions in their workplace. This type of competence is assessed by a psychogram of activity that should reflect the requirements for motivational, cognitive, emotional-volitional, characterological and other professionally important qualities of the subject of labor. These are so-called internal or behavioral competences that can be reflected in a psychogram desired for a given profession.

2) The set of special professional knowledge and skills that are necessary for workers to effectively perform their duties. These competences are contained in the professional program (Delamare, Winterton 2005).

The structure of competence that makes up its elements is an integrating link for all blocks of activating human resources. (Figure 2)
Fig. 2. Competence as a first notion linking all elements of the subsystem of activating human resources with functional strategies. Source: composed by authors

Therefore, at the present time, a competency-based approach is one of the main ones. With this approach it is argued that the professional and psychological competencies necessary for the successful performance of the role can be used as the basis of all processes related to human resources: selection, rotation, certification, etc. (Roberts 2005).

The advantages of this approach in strategic HRM are that it improves the accuracy of forecasts of future employee outcomes, based on an assessment of the characteristics of his personality and motivation along with an assessment of professional knowledge and skills. And it helps to do this with tools that increase the objectivity of the evaluation: electronic tests, interviews, questionnaires, etc. (Wood, Payne 1998, Chandan, Rama 2016, Otoo, Mishra 2018).

The set of behavioral competencies used to assess the applicant for a vacancy or the evaluation of an active employee to promote him to a specific position is represented by the following criteria:

- A system of characteristics of the area of activity in which an employee must be productive. This is, for example, for the project manager the ability to express his thoughts, teamwork, the ability to offer original ideas, the ability to inspire employees and control the process without dominating, etc. (Liikamaa 2015).

- Diagnosis of the employee's internal motivation for determining the probability of performing tasks assigned to him and obtaining the results necessary for the company (Priyono, Rijanti 2015).

The methodology for conducting research on behavioral competence for a particular company is possible in the following variants:
First variant. The test is developed by the company itself, formulating the professional and behavioral characteristics of the employee in this position, summarizing the requirements for the employee in the measure of
his understanding and training, sometimes largely intuitively. The applicant fills the test; the result is determined in the form of a set of qualitative characteristics or a sum of points. The results are considered by the line manager, the management of the HR department and the company and a decision is made either about an additional interview or on hiring (Taranenko 2015).

Second variant. The test is developed by experts of the consulting company taking into account the opinions of professionals working in this company. Since the creation of psychometric databases is quite a difficult task for its own solution, profile companies can be involved. Testing is carried out on the basis of the calculation of scores and candidates who do not gain a threshold value are known to be eliminated and are not allowed to the next stage. The remaining candidates are interviewed according to their place in the ranking and taking into account their strengths and weaknesses.

Third variant. The use of platform technologies as a combination of "partially or completely open technologies and additional assets that are not owned by the company and not controlled by it, but can be used by companies to develop the additional products, services and technologies necessary for it" (Gawer, Cusumano 2014).

Platform technologies are practically not used at the present stage of business development in Kazakhstan, despite the availability of online resources of online platforms for complex psychological diagnostics, for example, ProfDialog. Using platform technologies will allow the company to provide regular professional support of all issues related to the provision of human resources and their development.

We propose a method of blitz-psychogram that allows us to use the resources of the platform and on this basis to develop an additional product for the firm, taking into account the specificity of its activities.

As part of research, we developed and tested the following algorithm of actions:

**Stage 1.** The test for behavioral competence to fill a vacant post, presented on the platform of a specialized consulting organization, is tested on employees already working effectively in this organization in the relevant positions.

**Stage 2.** According to the test results, character traits and intelligence (abilities), behavioral competencies, internal motivation factors are inherent in all effective employees in this position. The evaluation of the roles that the employee plays in the team, that is, in contact with other people, is given.

Based on the results of the testing, the common features of these workers are determined by qualitative characteristics (A, B), and two scales (B, D):

- A) Motivation
- B) Character traits and settled mode of thinking;
- C) Behavioral competencies;
- D) Roles in the team.

**Stage 3.** The generalization of the results of leaders determines the range of values (for quantitative characteristics) or a set of characteristics (for qualitative characteristics) with which the candidate's result for the given position should coincide. The fall of the results into the "optimal" (100% coincidence) or "acceptable" (90% match) field makes it possible to make an assumption about the sufficient degree of success of the applicant's future work in the job sought.

The logical scheme for implementing the method of the blitz psychogram is shown in Figure 3.
Fig. 3. Methods for developing a blitz psychogram for drawing a portrait of the "ideal worker" in terms of internal competencies.

The test results serve as an objective basis for diagnosing the competitor's correspondence to the "ideal" job profile, and can also be used by the human resources management service to determine the type and form of vocational training that is most effective for a given employee, the construction of a career profile, horizontal and vertical rotations.

We developed and tested three psychograms:
- Project manager;
- Social worker;
- Emergency worker.

Each of them is the systematization of the psychological competencies of at least 50 successful employees who are leaders in their firms.

Psychogram "social worker". For companies providing social special services for older citizens and people with disabilities, a profile of the post of social care worker was drawn up. 90% of employees in such organizations work in this position (Pritvorova, Petrenko, Ayaganova 2017).

Given the relatively simple subject area of this activity, the requirements for the psychological characteristics of the social worker are quite specific and should be evaluated in the interests of both the employee and the client in order to ensure the highest social effect from the proposed service. In addition, the application of the psychogram method will ensure a reduction in the employer's costs for the vocational training of new employees, since only applicants with internal competencies for this type of activity will be recruited.

According to the results of the test, 77 employees of social service firms, of whom 24 are experienced employees with high client ratings, have the following profile.

On block A, the following factors of motivation should be present in the portrait of a social worker (Table 1).
Table 1. Significant factors motivating a social worker / social worker assistant

<table>
<thead>
<tr>
<th>No.</th>
<th>Internal factors of motivation</th>
<th>Content of factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Protection of somebody or assistance</td>
<td>Motivation to provide all possible assistance and provide protection.</td>
</tr>
<tr>
<td>2</td>
<td>Manifestation of altruism</td>
<td>Motivation to be necessary and useful to someone</td>
</tr>
<tr>
<td>3</td>
<td>Self-actualization</td>
<td>Motivation to realize the personal and professional potential</td>
</tr>
<tr>
<td>4</td>
<td>Communication and interaction</td>
<td>Motivation to improve the effectiveness of communicative contacts</td>
</tr>
<tr>
<td>5</td>
<td>Dedication</td>
<td>Aspiration to be necessary and in demand</td>
</tr>
</tbody>
</table>

*Source:* composed by authors

There are no points for this block, it is sufficient that there is a factor of internal motivation in the results of testing the applicant.

For block B, it is necessary to evaluate the hit of a value in the designated interval, so within the boundaries indicated, the required quality is significant, but not excessive. (Table 2)

Table 2. Character traits (sample)

<table>
<thead>
<tr>
<th>No.</th>
<th>Character trait (result measures in %)</th>
<th>Potential abilities</th>
<th>Notion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>1</td>
<td>Feminity (The need to care for and care for, to provide comfort for someone)</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Sensitivity (Altruism, the ability to sympathize, sensitivity, restraint)</td>
<td>55</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>Responsibility (Integrity, exacting to oneself, fidelity to the interests of the case)</td>
<td>50</td>
<td>70</td>
</tr>
</tbody>
</table>

*Source:* composed by authors

According to the block B, the applicant must have a predisposition to the types of activity that require:
- Accuracy;
- Desire to assist other people in overcoming difficulties through support, protection, rehabilitation;
- Ability to soberly and rationally perceive the events and assess the surrounding people, keep calm in all situations;
- Predispositions to monotonous activity requiring from the person multiple fulfillment of identical actions, algorithm.
These internal competencies should appear in the results of the corresponding block after passing the test. On the block D, the high scores should be in the job seeker for roles such as inspirer (10-8), collectivist (10-9), performer (8-7). The inspirer is distinguished by a normal type of behavior, a positive attitude towards people and events, is able to motivate the client for joint activities, enjoys communicating and interacting with others. The collectivist seeks to organize various, interesting events. The perpetrator tries to be responsible and conscientious, inclined to recheck the case he made to avoid mistakes (Figure 4).

At the same time, for the role of the Riversman (inclination to conflicts) there should be no more than 3 points. For the roles of administrator (administrator), creator, agitator, critic and strategist, the values at the bottom of the scale will be preferred: 3-5 points. For the role of the analyst, the value can be taken at the level of 4-6 points.

**Fig. 4.** Preferred intervals of the value of the scale for the role in contact with other people for the vacancy of a social worker, scores

*Source:* composed by the authors

Psychogram "Specialist in the provision of services in the field of sales."
The most massive positions in this area of the company are the positions of the seller, commercial agent, sales agent, sales manager, sales representative.

For all these posts, one type of psychogram can be compiled, since the typical psychological characteristics of these activities vary insignificantly.

The totality of these psychological characteristics represents the main list of psychological competencies for trade service employees and was the result of testing 73 employees of the company, of which 23 are sales leaders. Comparison of the results obtained revealed common characteristics for successful workers and their combinations. It is on the comparison of the characteristics of leaders and all other employees of the company that the list of character traits and the interval of values in which the parameters of each specific job seeker in the company should be located were revealed.

Based on the results obtained, the following characteristics of internal competencies are derived.
In the block A, the following factors of motivation should appear in the competitor, which are significant for this work (Table 3).

**Table 3. Significant factors of employee motivation for basic sales positions**

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Content of factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Influence and manipulation</td>
<td>Aspiration and the ability to use manipulative means of influence to achieve meaningful situational goals</td>
</tr>
<tr>
<td>2</td>
<td>Communication and interaction</td>
<td>Motivation to improve the effectiveness of communicative contacts</td>
</tr>
<tr>
<td>3</td>
<td>Preservation of the immutability of the personal and professional position and status</td>
<td>The desire to maintain stable work without much change for a long time</td>
</tr>
<tr>
<td>4</td>
<td>Submission</td>
<td>Aspiration to obey and follow instructions caused by the desire to avoid responsibility</td>
</tr>
<tr>
<td>5</td>
<td>Freedom of Self-realization</td>
<td>Striving for freedom of professional expression; desire to solve tasks that involve activity, build new contacts and connections</td>
</tr>
</tbody>
</table>

**Source:** composed by authors

Indicators included in Block B are shown in Table 4.

**Table 4. Character traits and the type of thinking for the employee in the field of sales**

<table>
<thead>
<tr>
<th>No</th>
<th>Character trait</th>
<th>Interval</th>
<th>Results measure in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity (speed, mobility, intensity of actions, behavior, satisfaction with life)</td>
<td>55-80</td>
<td>Above 80 points, activity is undesirable, because it can be associated with obsession</td>
</tr>
<tr>
<td>2</td>
<td>The need for communication (there is interest in getting to know different people, the ability to perceive a significant flow of people)</td>
<td>60-85</td>
<td>Excessive need for communication above 85 points will tire the client</td>
</tr>
<tr>
<td>3</td>
<td>Demonstrativeness (the ability to show oneself, someone or anything in the right light, if it contributes to the achievement of the goal, the ability to easily and naturally capture people's attention, vigor and ingenuity in their demonstrations)</td>
<td>55-75</td>
<td>A value higher than 75 is undesirable, since such behavior is perceived by others as insincerity, &quot;replaying&quot; the role, a false promise, most likely with may appear artificially</td>
</tr>
<tr>
<td>4</td>
<td>The ability to convince (communicative, ability to determine the tactics of behavior, based on the experience of interaction with people in different conditions, it is easy to establish contacts with different people, if interested in this)</td>
<td>60-80</td>
<td>With scores above 80, expressiveness and manipulation may repel the client</td>
</tr>
<tr>
<td>5</td>
<td>Pragmaticity (the ability to show empathy and stand on the client's position, to understand his needs from the standpoint of common sense)</td>
<td>50-70</td>
<td>With scores above 70, it may seem too prudent and rational, which can be associated with coldness and disinterest</td>
</tr>
</tbody>
</table>

**Settled mode of thinking**

<table>
<thead>
<tr>
<th>No.</th>
<th>Character trait</th>
<th>Interval</th>
<th>Results measure in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Conceptual intelligence (responsible for the structuring of speech, for a clear and competent presentation of their thoughts)</td>
<td>50</td>
<td>From the level of 50%, the average statistical rate begins</td>
</tr>
<tr>
<td>7</td>
<td>Imaginative intelligence (it handles visual information well, observant)</td>
<td>50-80</td>
<td>A level above 80 is undesirable, because it is more creative abilities and emotional burnout can begin</td>
</tr>
</tbody>
</table>

**Source:** composed by authors

For block B, the requirements for the behavioral competence of trade workers are presented in Table 5.
Table 5. Activities to which there is a high level of predisposition

<table>
<thead>
<tr>
<th>No.</th>
<th>Types of activity</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communicative</td>
<td>Activities related to interpersonal and mass communication through various means.</td>
</tr>
<tr>
<td>2</td>
<td>In the team</td>
<td>Activities that involve the desire and ability to work in a team and communicate.</td>
</tr>
<tr>
<td>3</td>
<td>Competitive</td>
<td>Activities aimed at achieving and maintaining the best position for oneself with respect to competitors.</td>
</tr>
<tr>
<td></td>
<td>Execution, role-playing</td>
<td>Activities to create different images, behaviors needed to achieve goals.</td>
</tr>
<tr>
<td>4</td>
<td>Manipulative</td>
<td>Activities aimed at the implicit motivation of other people to perform certain actions.</td>
</tr>
<tr>
<td>5</td>
<td>Requires flexibility and different directions</td>
<td>Activities in which you need the ability to quickly switch from one case to another, adapt to changing conditions, be included in a new job.</td>
</tr>
</tbody>
</table>

*Source*: composed by authors

In the corresponding section of the ProfDialog report, these activities should be listed in the list of activities for this subject, to which there is a high level of predisposition. For block D (roles in the team), job seekers of the position should have corresponding characteristics of the intensity of the roles in the team, the maximum and minimum values of which are shown in Figure 5.

![Fig. 5. Preferred ranges of the scale value for the role in contact with other people for the sales professional, scores](source.composed.by.the.authors)

The applicant for the post will have the best rating on the psychogram if he has the following characteristics in the above intervals in the report. High values of the scale should be observed in such characteristics as agitator (9-10 points), and also for such roles as a collectivist, analyst, strategist (all three characteristics should be in the range of 8-6 points). The leading characteristic of the "agitator" means that the applicant has the expressed abilities of effective self-presentation, knows how to attract people's attention, to present various information in such a way that it becomes interesting to the listener. At the same time, the competitor is effective as a propagandist and knows how to interact with people. "Collectivist" easily builds profitable personal relations, avoids conflicts and embarrassments. "Strategist" has the ability to see the future. Being enthusiastic about the subject of discussion, can successfully speak to the audience and cause interest in people, promoting their ideas and principles.

According to the results of the four blocks, applicants who meet the characteristics by 100-90% have a sufficiently high potential for the professional activity in question.
Conclusion

Providing an organization with human resources and activating their activities is one of the most difficult tasks of maintaining the sustainability and competitiveness of any business. To solve the problem of activating human resources, the use of psychographic methods is important not only at the stage of selection of employees, but throughout the whole period of his work in the company to maintain interest in the results of his work and the company as a whole, and to prevent emotional burnout. It is advisable to accept and improve the qualification of an employee with suitable posts by psychographic characteristics, since its effectiveness will always be higher than that of an employee without an internal predisposition to this type of activity.

Platform technologies make it possible to reduce the costs of creating your own IT infrastructure for human resource management in the form of a complex of tests and diagnostics, algorithms and solution templates. Using the resources of online platforms, which, as shown in the example of services in the field of personnel selection, evaluation and development, provide qualified support for managerial decisions in the field of human resource management. At the same time, an organization can develop its product on the basis of its resources, as we have shown in the example of a psychologist's specialist. This product will reflect both the general requirements for the employee in this position, and take into account the specifics of the company's activities. It will be a tool of prescriptive analytics in the field of human resource management, since will warn about possible problems when hiring a specific job seeker, but at the same time help in the development of management decisions to activate human resources and ensure business sustainability.

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High performer can activate to creation and distribution of new knowledge, creation of sustainable communication channels for the exchange of work experience (Boxall, Macky 2007; Beltrán-Martín, Roca-Puig 2014; Sanchez 2015).


ProfDialog – Online platform for complex psychological diagnosis. https://prof-dialog.com/ (Access date 27.08.18)


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