Application of assessment center tools for the evaluation of the efficiency of personnel competencies and for the development of the intellectual potential of enterprises

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Lead. This article offers a new approach to assessing the existing level of professional competencies of enterprise personnel on the example of middle management managers of one of the enterprises of the most dynamically developing sphere of the digital economy – the creation and implementation of digital economy products. The results obtained made it possible to conduct a brief analysis and develop recommendations for the transformation of the structure of professional competencies of middle management managers. The strengths and areas of competence development are identified, proposals for the development of individual development programs for middle management managers are formed.

Keywords: enterprise, personnel, intellectual potential, competencies, tools, assessment center.

Foreword

Today, many Russian enterprises carry out its production activities under the conditions of the negative impact of sanctions restrictions. This circumstance highlights the presence and development of the intellectual potential in determining promising areas and opportunities for its progressive development. At the same time, the intellectual potential of each enterprise is individual, depending on its industry affiliation, type of production activity, organizational and legal structure and a number of other factors that have a greater or lesser influence on its formation.

In the most general sense, the intellectual potential is usually understood as the personnel of an enterprise that has a certain level of professional competencies, capable of building them

up and transforming them to ensure the development of the enterprise's production activities. The harmonious development of the intellectual potential of enterprises is becoming more relevant than ever in order to ensure the successful counteraction to sanctions restrictions, since it minimizes the costs of financial, material, information-technological and other types of resources necessary for the organization of production. This circumstance is particularly evident in the example of medium-sized and small modern enterprises engaged in the creation, production and sale of digital economy products. The intellectual potential and development prospects of such enterprises are largely determined by the level of professional competencies possessed by their personnel in general and middle management managers in particular.

Research purpose

The main purpose of this study is to substantiate the possibility of using the assessment center's tools to assess the effectiveness of existing professional competencies of enterprise personnel and develop their intellectual potential on this basis. For its implementation, a contingent of middle – level managers of one of the enterprises of the most dynamically developing sphere of the digital economy was selected- the creation and implementation of digital economy products.

Materials and methods

The novelty of the proposed approach to the management of the formation of the intellectual potential of the enterprise lies not only in determining the level of professional competencies of managers of the middle management level, but also in creating conditions for their development (an internal determinant of the formation of the intellectual potential of the enterprise). At the same time, the company's management must create all the necessary conditions for the development of professional competencies for all personnel contingents (an external determinant of the formation of the intellectual potential of the enterprise). Thus, the essence of the proposed approach is to combine these determinants and use a dynamic approach for the continuous development and professional competencies of the company's personnel.

The most significant indicators from the point of view of their impact on the performance of each manager and the enterprise as a whole were selected as criteria for evaluating the professional competencies of managers of the average management level of the studied enterprise. It includes:

1) result orientation-implies the desire and ability of the manager to focus his attention on achieving the set goals and its resource support through quantitatively and qualitatively measurable indicators of the implementation of business processes;

- 2) leadership-implies the ability to lead subordinates, inspire and motivate them to achieve the set goal in such a way that they can achieve the desired result, while demonstrating standards and quality of work above their usual level;
- 3) performance management-implies the ability to effectively delegate their powers and organize a cycle of managing them, starting with setting tasks and organizing control over their implementation and ending with receiving feedback and making adjustments if necessary;
- 4) ability to work in a team-implies the ability to establish relationships with colleagues at work, create a comfortable working atmosphere in the team, the desire to contribute to the achievement of goals;
- 5) stress resistance-implies the ability to control emotions, remain calm in pressure situations, cope with long loads or a large amount of information, work effectively in non-standard situations, quickly restore their performance, maintain it at a high level;
- 6) self-organization-implies the ability to plan your actions in time, rationally prioritize, effectively use time and achieve set goals within the planned time frame.

The tools of the assessment center (AC) were chosen for conducting an empirical study. Its advantages and disadvantages are well studied and described both in fundamental works [3, 7] and in the works of the authors of this article [5, 6]. In our country, the AC tools have been used for more than 30 years. During this time, it has established itself as one of the most popular methods for assessing the professional competencies of personnel of enterprises in various sectors of the economy. According to the Federation of Personnel Assessment, more than half of the 150 largest companies on the Russian market have used AC tools in the last 10 years [9]. Standards have been adopted that prescribe the principles and procedures for its implementation [2]. Practical manuals have been published, in which the methodology, technology and ethical issues of using the AC tools are disclosed in detail [4, 8]. An analysis of the practice of its application in our country and abroad gives every reason to believe that its use helps to obtain comprehensive and objective information about the professional competencies of the company's personnel [2, pp. 51-52].

In comparison with other methods of personnel assessment, the main advantages of using the AC tools are as follows:

- makes it possible to obtain more balanced and reliable assessments of the professional competencies of the staff in comparison with the assessments obtained using other methods [4];

Stipulating key moments:

1) the cases within the AC toolkit are modeled on the basis of real working situations that the specialist will face;

- 2) each professional competence is identified on the basis of the application of at least 2 methodological techniques;
- 3) each specialist is monitored by several experts, which significantly reduces the subjectivity of assessing his professional competencies.
- ensures an "honest" and correct procedure for evaluating the professional competencies of personnel by the organization, even if as a result of it, applicants did not receive an invitation to work or were not offered a new position;
- allows you to get a comprehensive assessment of a particular specialist, which simultaneously provides information on the entire composition of the competencies that he has;
- provides a multifunctional use of the results, on the basis of which you can simultaneously make several decisions for a group of specialists;
- provides time savings, since as a result of using the AC tools, you can get estimates for several groups of specialists;
- provides visibility of the results, which are presented in the most detailed and accessible way, which makes it easy to determine the current level and features of the development of certain professional competencies in any specialist;
- allows you to assess not only the current level of professional competencies of a specialist, but also the availability of potential opportunities and abilities for the successful development of new competencies [4].

To assess the managerial competencies of middle management managers of the studied enterprise, a three-point scale was selected with a step equal to "0.25" points, where:

- the rating "3 points" corresponds to the level of skill and implies a particularly high degree of development of this competence;

Middle managers of an enterprise who have reached this level are able to apply their competence in non-standard situations or situations of increased complexity. They can take initiatives related to expanding the scope of this competence.

- the rating "2 points" corresponds to the level of experience and assumes that the head of the middle management level has fully mastered this competence;

This means that in standard situations, he/she does not make mistakes, and the manifestation of competence skills occurs automatically.

- the "1 point" rating corresponds to the level of development and means that the head of the middle management level understands the importance of this competence and is in the process of mastering it;

However, the skills of competence are unstable, mistakes are possible in standard situations, it is necessary to make conscious efforts to manifest skills.

- the score "0 points" corresponds to the level of incompetence and means that the head of the middle management level does not possess competence, does not try to apply and develop it.

The study sample consisted of 12 middle rank managers (heads of departments), whose age ranged from 23 to 49 years. There were 7 men and 5 women among them.

When conducting an empirical study using the AC tools, all middle rank managers were randomly divided into 3 subgroups, for each of which the competence assessment took place on a separate day. The process of assessing competencies using the AC tools corresponded to the standard technology and contained the following stages [1]:

- 1. Specialists within the framework of the AC toolkit pass cases, and observers record behavioral manifestations and statements of participants in the observation form. In each case, a specific observer was assigned to a certain specialist. In the corresponding cases, the observer also acts as a role player at the same time (usually at the managerial AC this is the role of a subordinate with whom the AC participant needs to talk as a manager under the terms of the case). At the interview stage, the assessor conducts an interview and records the candidate's answers. Thus, the tasks of the assessor within the framework of using the AC tools were as follows: monitoring the behavior of specialists and recording information; conducting role-playing games within the framework of cases; conducting interviews.
- 2. The observer processed all the collected information individually using classification technology ("classification of behavior units relative to competence indicators" [1, p. 141]). To do this, the assessor attributes each unit of behavior from the observation form to a certain indicator of a certain competence in a checklist specially prepared for this case. Then, in each checklist, the observer sets an assessment for a particular competence of the manager according to the accepted measurement scale. The result of this stage is a completed checklist for each case for each participant from each observer attached to this participant in this case.
- 3. After using the AC tools, an integration session is held, at which assessors discuss their assessments and conclusions, and each participant is given a final assessment for each competence.
- 4. Then a written report is compiled for each participant with conclusions about his "strengths" and "growth zones". It includes recommendations for development for a specialist and recommendations for managing a specialist-for his head.

AC tools comprise 6 assessment instruments:

- 1) simulation group case "Additional opportunity";
- 2) simulation group case "Preparation for the exhibition";
- 3) individual simulation case with role-playing game "Time trouble";

- 4) "Probation period" individual simulation written case;
- 5) written testing;
- 6) talk show.

This set of tools was selected on the basis that each competency should be assessed using at least two tools. [1, p. 31].

All the simulation cases were combined by one "legend". Each middle-level management manager was asked to imagine himself as an employee of another fictional enterprise. At the same time, each specialist was given brief information about the activities of the fictional enterprise, its history, results and plans. This approach (a single legend) allows each specialist to immerse himself as much as possible in simulated situations and behave as naturally as possible in them (similar to how he behaves in real activity).

In the "Additional opportunity" case, all specialists acted as managers of one of the divisions of a fictional enterprise. Their task was to promote their unit and convince others of this decision. At the same time, the common goal facing all specialists (in the context of this case, the heads of departments of a fictional enterprise) was to choose a finite number of promoted departments, which will be obviously smaller (in our case – 2). Thus, in this case, there was a certain conflict between the personal interests of each specialist and the general interests of the company's management, as well as between the interests of individual specialists. In this case, such competencies were observed as: result orientation, leadership, ability to work in a team, resistance to stress and self-organization.

In the individual case "Probation period", the specialist was asked to solve a problem related to the adaptation of a new employee at the workplace. To do this, the specialist had to study the information about the position that the employee entered, his/her biography and prescribe for him: goals and a work plan, ways to control him and his motivation, as well as prepare a welcome letter for the employee. This case was used to assess the competencies: leadership, performance management, self-organization.

The case "Preparation for the exhibition" is also a group task. It has been repeatedly used in different variations of the use of the AC tools [6].

The individual case "Time trouble" was a task in which the specialist had to sort out the to-do list and make a written plan of the day, and then talk to one of the subordinates (an observer acted as a subordinate) in order to delegate some of the work powers to him. The following competencies were evaluated using the case: result orientation, leadership, performance management, stress resistance and self-organization.

The essence of the "Competence talk show" method is that the interviewee is asked questions about his past with a request to give an example of his actions in a certain situation (it

is asked by the interviewer) and describe his behavior in it. For example, "Give an example when you needed to complete a task that you had not previously encountered". This method is based on the following relationship: as the competence was manifested in the specialist in the past, so it is highly likely to manifest itself in the future. Thus, the "Competence talk show" method allows you to supplement the idea of a specialist's competencies by analyzing his behavior in a situation that may actually arise in practice.

Results and discussion

A summary table with the final assessment points for each competence and the assessment of the set of competencies for each of the 12 middle management managers is shown below.

In general, the absence of the highest values for all competencies (3 points) is noteworthy in the sample, which indicates the degree of availability of competencies at the level of experience when they are manifested in standard situations. The manifestation of competencies in non-standard, creative situations that require initiative is uncharacteristic for managers of this sample.

Table
Final points for each manager competencies and its points by the totality of competencies

№ i/o	Assessment criteria (competency)	Participants											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Result-orientation	1,25	2,25	2,0	1,75	2,0	1,75	2,0	2,0	1,5	1,75	0,5	2,0
2	Leadership	0,75	1,5	1,5	2,0	1,5	1,5	1,5	1,75	1,0	1,25	1,0	1,25
3	Performance management	1,0	2,0	1,25	1,75	1,5	1,75	1,5	2,0	1,5	1,25	1,75	1,25
4	Ability to work in a team	1,5	1,0	1,75	1,75	1,5	1,25	1,75	1,75	1,5	2,0	2,25	1,75
5	Stress resistance	1,75	1,5	1,75	2,0	1,75	1,75	1,5	1,5	1,5	2,0	1,0	2,0
6	Self-organization	1,5	1,5	1,5	2,0	1,5	1,5	1,5	2,0	2,0	1,75	1,75	1,75
	Final point by competencies		1,6	1,6	1,9	1,6	1,6	1,6	1,8	1,5	1,6	1,4	1,7

Personally developed for each middle manager:

- 1) individual report on all competencies, indicating strengths and development zones;
- 2) detailed recommendations as to the training and development of competencies.

Due to the rather huge volume of such documents, as well as to its individual & personal orientation, it has not been included in the article hereunder.

Opinions

Results, obtained in the course of research, allowed to formulate following opinions.

- 1. To solve the tasks set and conduct an empirical study, it is advisable to use the tools of the assessment center. Its advantages in comparison with other methods are presented, the main stages of its implementation are described, as well as the tools used, namely: group simulation cases; individual simulation cases with role-playing games; individual simulation written cases; interviews.
- 2. The composition of the most relevant competencies for middle rank managers from the point of view of the enterprise management is determined, which include: result orientation; leadership; performance management; ability to work in a team; stress resistance; self-organization.
- 3. The use of the AC tools allowed us to obtain data that allowed us to identify the structure of managerial competencies of middle rank managers of the enterprise. On the basis of a dynamic approach to competencies and the capabilities of the AC tools, strengths are identified and areas of competence development are identified. These results can be used in the development of programs for the individual development of managers' competencies.
- 4. The absence of competence ratings higher than 2.25 points for any of the studied competencies indicates the presence of competencies at the level of experience, when they are manifested in standard situations. The manifestation of competencies in non-standard, creative situations that require initiative is uncharacteristic for middle-rank managers of this enterprise.
- 5. Among the priority tasks facing the management of the enterprise in the field of managing the formation of its intellectual capital, training of middle management managers and improving the level of their professional competencies are identified.

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