Creation of the Strategic Personnel Development Program

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Abstract—**Competence and motivation of staff are the most important factors that ensure the competitiveness of modern organizations and require continuous development. The key rules and tools for developing a program for strategic development of personnel are analyzed, its structure is determined. The structure of the competency model is justified as the basis for determining the directions of professional development of employees. As an illustration of the proposed approach, the position of the head of the marketing department in the organization was selected. A competency model for the position has been formed, rating scales have been developed for each of the selected competencies. The gaps between the requirements of the position and the level of development of the competencies of a particular employee are determined. A technology for developing a professional development program based on building a profile of employees' competencies, identifying training needs and choosing methods for developing priority competencies is proposed, tools for its implementation are developed. Based on a comparative analysis of the methods for assessing the needs in the development of competencies, recommendations are formed on their application depending on the group of competencies (functional, cognitive, personal). To determine the priorities for the development of competencies, a matrix model of their ranking was constructed according to the criteria of importance and problematicness, determined by the size of the gap between the competency levels of the position and the employee. Criteria for the selection of personnel training methods are determined and their classification is determined according to the selected criteria. A model has been developed for choosing the most appropriate method for developing competence according to the criteria of effectiveness, cost and duration of training.**

Keywords: personnel training, employees' competence structure, priority competence methods, professional personnel development

I. INTRODUCTION

Personnel builds the competitiveness basis of any company while its stability depends on competency, moti-vation and ability for development of workers. To strengthen this basis and build on it a solid facade corresponding to the modern economy requirements, managers use various tools, one of which is a staff development program

Personnel development can be defined as systematic upgrade of employees competency by expanding and deepening existing professional abilities, training new qualifications, as well as increasing the motivation and organizational capabilities for more thorough realization of the employees' potential. This training oriented toward achieving the organization's goals.

Personnel development programs include educational and professional growth activities, motivational pay schemes; employee participation in management, creating conditions for rest and leisure [1].

The strategic character of such programs is constructed by the necessity of quantitative and qualitative characteristics of personnel compliance with the strategic goals of the organization. The investments in staff development are understood as investments in the human capital of the enterprise.

Considering the wide circle of resolving problems there are two general directions of development to be distinguished: professional and organizational training. The last one is closely connected with elaborating of motivation system, its formation and influence on the organizational culture. At the same time the professional development contain the elements of motivation as well. It should be mentioned that the very possibility of professional growth is one of motivation methods and also the achieving the high professional results is a source of internal reward.

II. Literature Review and Research Methods

Practical and theoretical aspects of personnel development programs have been studied by a number of Russian and foreign scientists [6,7,8,9,10,11,12].

Most of mentioned authors cover very specific area of personnel development pointing a rather narrow problem or only a certain activity field [10,11,12]. Thus a complex and more or less universal personnel development model shall be suggested.

Taking into account that development of the personnel is designed to achieve the strategic goals of the company, and the quality of the program elaborated can be evaluated by its realization results our research methods structure of professional development program can be suggested:

- designing the working standards in consistence with the strategic objectives of the organization;

- positions profiling , including elaboration of individual work plans, , compiling a list of competencies, developing levels of competency profile, creating position profiles for specific positions;

- identification of competency development needs;

- selection of teaching methods (development of competencies);

- budgeting for training and developing a program implementation plan;

- assessment of the results of the implementation of measures for the development of personnel..Setting standards requires understanding the strategic goals and specifics of the organization. This is why the suggested technology provides for the implementation of the stages associated with the identification of needs for the development of competencies and the rationale for the choice of methods of professional development and training. The important element of the proposed technology is the use of the employee competency profile [2, 3]. In this work, competencies are understood as an integral characteristic combining the knowledge, skills, values, norms, behaviors necessary to perform a specific work in accordance with the goals and values of the company.

There are various approaches to the classification of competencies. L.M. Spencer [3] proposes the "competency clusters" such as achievement and action, help and service for others, impact and influence, managerial competencies, cognitive competencies, personal effectiveness. K.Kh. Rampersad [2] consideres the following categories of professional competencies:

- competencies related to personality and level of intelligence;

- competencies at the level of knowledge: what you need to learn and to know;

- competencies at the skill level: what a person should be able to do;

- competencies at the level of behavior: relationships, principles, norms and values, demeanor and other qualities necessary in order to occupy a certain position.

In accordance with the European qualifications system there can be allocated:

- cognitive competencies involving the practical use of theory and concepts, as well as hidden knowledge gained from experience;

- functional competencies (skills), namely, what a person should be able to do in the labor sphere, in the field of further education or in social activities;

- personal competencies, including behavioral skills in specific situations;

- ethical competencies, requiring certain personal and professional values, as well as a positive worldview.

III. Results

The above explained exploration logic can be illustrated on the example of building a profile of competencies for the head of the marketing department of a research & production company. The competences set by European qualifications system are taken as basis with having united personal and ethical competences in one group as on our opinion they are very close in essence

The profile creating requires the following steps.

- informational arrangement;

- formation of competencies list;

- study of competency profile levels.

The first step was a series of structured interviews with: the head of marketing department ("position holder"), senior manager (director of the company), colleagues, subordinates. There also have been studied the job descriptions and unit plans, as well as the strategic tasks that the employee must solve such as sales increase , the supply chain building, support of the order from the receipt of the application to the design office to the shipment of the product to the customer, etc.

TABLE I. COMPETENCY ASSESSMENT OF THE HEAD OF THE MARKETING DEPARTMENT OF THE COMPANY

Competencies	Employee level	Impor-tance	Proble-maticity	Priori-ty
Functional:				
1. Education	3	4.3	2	6.3
2. Work experience	3	3.7	2	5.7
3. Market knowledge	2	4.7	3	7.7
4. Goal setting	3	4.3	2	6.3
5. Problem Solving	3	3.3	2	5.3
Cognitive:				
6. Knowledge of a systems approach	2	2.3	3	5.3
7. Marketing knowledge	2	4.3	3	7.3
8. Knowledge of the general economy	3	3.3	2	5.3
9. Knowledge of technological and design features of products	2	3.7	3	6.7
Personal:				
10. Mentorship	4	3.3	1	4.3
11. Leadership	3	3.7	2	5.7
12 Collaboration	4	4.3	1	5.3
13. Understanding the goals and values of the company	3	5.0	2	7.0
14. Focus on development	4	3.7	1	4.7
15. Focus on change	4	3.3	1	4.3

After that on the basis of arranged information the expert group has designed the list of competencies of the head of the marketing department of the company (table I) and worked out the levels of the profile of competencies (table II).

TABLE II. EMPLOYEE COMPETENCY PROFILE (FRAGMENT)

Level 1	Level 2	Level 3	Level 4
Competence: Knowledge of technological and design features of products			
Knows the nomenclature of products and its main characteris-tics. Not familiar with technological and design features	Knows the characteristics of the products well, however, the technological aspects of the production cause difficulties	Proficient in technological and design features of the production	Highly proficient in technological and design features of the produc-tion. Able to make sug-gestions for improving products.
Competence: Focus on change			
Might provide some resis-tance to changes, but, after reali-zing their importance contributes to them	It takes positive changes in the company, trusts management decisions. Organizes effective change implementation.	Motivates employees to participate in changes initiated by company management. Contributes to their successful implementation.	Able to initiate changes in the activities of the unit, consistent with the goals of the company. Manages the changes wisely.

To substantiate the choice of a method for assessing the actual level of competencies of an employee, a comparative analysis of various methods for assessing personnel was conducted. Based on its results certain were formulated on the appropriateness of applying one method or another to identify needs for the development of various groups of staff competencies (table. III).

So, in the considered example, to identify the needs for the development of the functional group of competencies, the following methods were used: questionnaires, tests and 360-degree feedback; for a group of cognitive competencies - study of documentation, interviews and expert support. The needs for developing personal competencies were assessed using methods such as 360-degree feedback, observation, and interviews. The 360-degree feedback method involves the simultaneous assessment of an employee by his/her manager, subordinates, colleagues and "consumers" of the results of his activities. This, firstly, allows to reduce the degree of subjectivity of the assessment, and, secondly, provides a more complete picture of the results of the employee, his/her professional and personal competencies.

TABLE III. THE USE OF ASSESSMENT METHODS TO IDENTIFY THE NEEDS FOR THE DEVELOPMENT OF COMPETENCY GROUPS

Methods	Needs		
	functional	*cognitive*	*personal*
Questioning	Highly recommended	Recommended	Not Recommended
Documen-tation study	Recommended	Highly recommended	Not Recommended
Observation	Recommended	Not Recommended	Highly recommended
Interview	Recommended	Highly recommended	Highly recommended
Customer Opinion Surveys	Highly recommended	Not Recommended	Recommended
Tests	Highly recommended	Highly recommended	Recommended
360 degree feedback	Highly recommended	Recommended	Highly recommended
Certification	Recommended	Highly recommended	Not Recommended
Using consultants	Highly recommended	Highly recommended	Recommended

It is proposed to compare the actual level of competence of the employee determined during the assessment with the level of the position in the form of an enneagram that provides high visibility of the results (Fig.1).
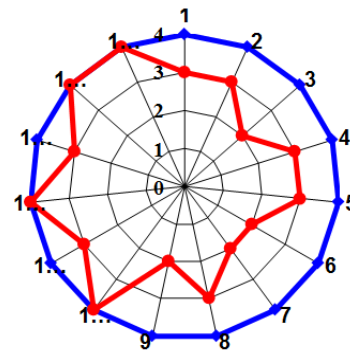

Fig. 1. Comparison of competency levels of the position (blue line) and the employee (redline), 1-15 competences

The lowest scores were obtained by competencies: knowledge of marketing and a systematic approach, knowledge of the market, technological and design features of products. This can be explained by the fact that the assessed employee recently came to this company and previously held a leadership position in a different area.

The next stage in the technology for creation a strategic development program for personnel is setting the rationale for the chosen training methods. For this, firstly, the most preferable competencies for development are determined, and secondly, a classification of training methods is carried out, which allows to make decisions regarding the most suitable methods to bridge the identified gaps in the level of priority competencies.

IV. DISCUSSION

To select the priority competencies, an algorithm to index the importance and problematic competencies, suggested by the consulting company "Business engineering technology" [5] was used. The index of importance (II)is defined by experts considering the level of influence of certain competence to achieving the goals of the employee. The degree of problematicity (DP) is calculated on the basis of assessing the actual level of possession by an employee of this competency according to Fig.1 The priority of competence is defined as the sum of II and DP. The results of the assessment are given in table 1 and in figure 2 in the form of a matrix ranking competencies. First of all, competencies that fall into the upper right corner of the matrix require development: knowledge of marketing (C7) and the market (C3), understanding of the goals and values of the company (C13).

Problematicity (points)	Importance (II, points)						
	1	2	3		4	5	
4							
3		C6		C9	C7	C3	
2			C5, C8	C2, C11	C1, C4		C13
1			C10, C15	C14	C12		

Fig. 2.   Competency Ranking Matrix

The classification of more than two dozen possible forms and methods of personnel training, selected according to the results of the analysis [4], was initially carried out according to such characteristics as:

- type of training - at the workplace (with or without separation from production) outside the workplace;

- the content of the training - introductory (upon hiring), production (upon changing and / or advanced training), behavioral (for employees holding managerial positions);

- category of trainees (workers, specialists, middle managers, top managers);

- the degree of learning activity - active, passive, mixed;

- the number of trainees - individual and group;

- training periods - short, medium and long term.

Here we provide a brief description of some training methods:

- briefing - explanation and demonstration of working methods directly at the workplace. It is focused on the study of specific operations or procedures that are part of the learner's professional responsibilities;

- rotation - an independent training method providing the employee to be temporarily moved to another position in order to acquire new skills. It allows to overcome the professional narrowness of knowledge, stimulates the development of new skills, provides a better understanding of the structure of the company, its organizational culture, and helps to establish closer intracorporate relations. Rotation facilitates identifying the employee's interests, strengths and weaknesses, finding opportunities for his/her best use within the company.

- mentoring - the performance of production functions under the supervision of a mentor with regular receipt of insightful feedback. Its advantages are the ability to more accurate   taking into account individual characteristics in determining the pace and content of training; the possibility of learning not only the performance of professional functions, but also the education of a young employee, facilitating the assimilation of the required models of working behavior by the trainee. Limitations of the method are the high expenses of time and efforts for training one person, as well as the limited ability of the mentor to pay much attention to the learners, since he is not exempt from doing his major job;

- copying method (greatly simplified version of mentoring) - the employee learns by copying the actions of the trainer;

- delegation of responsibility method - giving the employee additional rights and responsibilities during the course of the assignment;

- action learning - gaining new knowledge and skills in the process of performing a specific task. The method peculiarity is that the learners work on real, not educational, tasks; they learn from each other, not only from the "teacher"; the purpose of the work is the implementation of the results;

- case study - one of the most widely used methods active learning and decision making. The purpose of the method is to teach students (both during individual and group work) to analyze and structure information, identify key problems, formulate goals, generate alternative solutions, evaluate them, choose the optimal solution and develop action programs to achieve goals. Develops skills that will enable learners to successfully solve problems in their professional activities

- skills development course - the main focus is on the practical development of specific skills. During the

simulation of specially defined situations, learners get the opportunity to develop the necessary skills, master new behavior patterns;

- group discussion - focuses on the fullest possible use of the previous experience of the learners: it is not the teacher who talks about how it should be, what is right, but the learners themselves generate ideas, substantiate approaches and solutions to the problem according to the scheme proposed by the teacher. It is especially effective for study of complex material as it provides very good feedback opportunities. Often used when analyzing situations, conducting trainings;

- business and role-playing games - in addition to analyzing situations, they involve greater use and development of behavioral skills, help learners understand their strengths and weaknesses, assess the positions and reactions of other people, and develop communication skills. Game situations, as a rule, reproduce typical real situations where several trainees play certain roles (for example, the boss and subordinate, client and seller) in certain circumstances, trying to achieve a solution to the educational task;

- in-basket training (analysis of business papers) - the trainee is offered to act as a leader who urgently needs to disassemble the business papers accumulated on his desk (letters, memos, faxes, reports, etc.) and take certain actions on them . In addition, he receives all the necessary information about the organization and about the leader on whose behalf he has to speak. This method develops the ability of learners to analyze, select the most important facts and find ways to solve various problems; allows to evaluate the learner's ability to work with information, the ability to prioritize and act in terms of limited time and resources;

- behavioral modeling - a relatively new method of teaching interpersonal skills and changing attitudes. It is based on the development of a "behavioral model" of professional behavior which is proposed to be mastered. Allows consider the individual characteristics of learners: for example, give more time for slower learners;

- benchmarking - staff training using the excellence advance, simulating successful models of competitors' behavior;

- coaching is a method of activating a person's potential. A trainer (coach) helps find answers to important questions for a trained employee. The task of a coach is not to make decisions for the learner, but to widen his/her understanding of the problem and possible solution;

- e-learning (via Internet) - online learning, when the learner and the trainer, being far from each other, interact in real time, communicate with each other using computer; can only be effectively implemented in regions with a good telecommunications infrastructure.

To suggest recommendations on the selection of effective training method and create a development program, it is necessary to determine the relevant criteria. Table 4 contains the list of suitable criteria and their assessments. Table 5 accumulates the characteristics of teaching methods according to listed criteria.

TABLE IV.   STAFF TRAINING METHODS SELECTION CRITERIA

Criteria	Assessment		
	1	*2*	*3*
A. Cost	Low (0 – 10 th.RUR)	Medium (10 – 50 th.RUR)	High (over 50 th.RUR)
B. Duration	Short-term (1 – 7 days)	Medium (1 week – 3 months.)	Long-run (over 3 months)
C. Practicability	Theoretical	Mixed	Practice oriented
D. Professional level	Interpersonal	Mixed	Professional
E. Complexity level	One field-specific	Few fields-specific	Complex
F. Number of participants	Individual	Group (2 – 20 pers.)	Large group (over 20 pers.)

The following selection scheme is proposed:

- preliminary selection of methods is performed considering the identified need for the development of competencies. The resulted criterion will combine such characteristics of the method as Practicability, Professional and Complexity levels ($R_i = f \{C_i, D_i, E_i\}$);

- selection refinement is carried out according to the criteria of Cost (A_i) and Duration (B_i) of training. Most preferred is the method that scored the minimum points (Table 6). In our example, for the competence "knowledge of the market" this corresponds to a case-study, for the competency "knowledge of marketing" - thematic seminar, while training using group discussion will contribute to a better understanding of the goals and values of the company.

TABLE V.   DESCRIPTION OF TRAINING METHODS (FRAGMENT)

Method	Criteria values
M1.Briefing	A.1; B.1; C.3; D.3; E.1; F.1
M2.Rotation	A.1; B.2; C.3; D.2; E.2; F.1
M3.Mentoring	A.1; B.2; C.2; D.2; E.3; F.1
M4.Copying method	A.1; B.1; C.3; D.3; E.1; F.1
M5.Delegation of responsibility	A.1; B.2; C.2; D.2; E.3; F.1
M6.Action learning	A.1; B.2; C.3; D.2; E.2; F.2
M7.Case study	A.1; B.1; C.2; D.3; E.3; F.2
M8.Skills development course	A.2; B.1; C.3; D.2; E.3; F.2
M9.Group discussion	A.1; B.1; C.2; D.2; E.3; F.2
M10. Business and role-playing games	A.1; B.1; C.2; D.2; E.3; F.2
M11.Thematic seminars	A.2; B.1; C.2; D.3; E.1; F.2
M12. In-basket training	A.1; B.1; C.3; D.3; E.2; F.1
M13. Behavior modelling	A.1; B.1; C.2; D.2; E.3; F.2
M14. Benchmarking	A.1; B.2; C.3; D.3; E.3; F.2
M15. Coaching	A.2; B.2; C.2; D.2; E.3; F.1
M16. E-learning	A.2; B.2; C.2; D.3; E.3; F.2

TABLE VI.   METHOD OF TRAINING RECOMMENDATIONS

Competence	Performance	Methods	Cost	Duration	Σ
C3 – Understanding the market	C.2; D.3;E.3	**M7**	**1**	**1**	**2**
		M13	1	2	3
		…			
C7 – Knowledge of marketing	C.2; D.3; E.1	**M11**	**2**	**1**	**3**
		M16	2	2	4
K13 – Understanding company's goals and values	C.3; D.2; E.3	M3	1	2	3
		M5	1	2	3
		M8	**1**	**1**	**2**
		M9	**1**	**1**	**2**
		M15	2	1	3

V. CONCLUSION

Therefore, the proposed technology for developing a professional development program for personnel includes three main stages:

- building a profile of competencies as a form of presenting specific requirements for professional and behavioral knowledge, skills of an employee holding a certain position;

- identification of needs for the development of competencies;

- selection of training methods (development of competencies).

To suggest the best suitable recommendations, our study included analysis and classification of wide range of competence level evaluation methods, identifying needs in training, elaboration of unique measures for development of the personnel program such as selection of training methods basing on the combining the criteria of performance, cost and duration.

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