# APPLICATION OF MODERN DEVELOPMENT TOOLS IN INCREASING THE COMPETENCE OF THE STAFF

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**Abstract.** The article substantiates the main components of improving staff competencies in the face of change. It is determined that taking into account and combining "hard skills" and "soft skills" skills allow you to use the acquired knowledge to perform specific tasks in the workplace in a particular professional activity. Modern and traditional models, techniques and tools of personnel management are presented, according to which it is possible to clearly assess the difference in approaches to managing the competence of employees in the conditions of change. Based on the analysis of world practice, a list of methods is presented: discussions, brainstorming, Oxford debates, Case - Study, business and role - playing games, workshops, communication and management training, which are used to develop skills and abilities of employees. These methods allow expanding the educational opportunities of established forms of classes (lectures, seminars). The relationship between the acquisition of new and improvement of existing staff development competencies on the basis of training and coaching is shown. The proposed methods of acquiring competencies allow you to choose those competencies and methods of acquiring them that correspond to the individual characteristics of organizations. It is proved that the acquisition of competencies by staff allows identifying new competencies in employees, to form the need to use modern analytical and behavioral skills, providing greater opportunities for management skills and flexibility, dialectical thinking, ability to make creative decisions in unusual situations. It is substantiated that the combination of the SMART method in the acquisition of competencies significantly expands the possibilities of short-term learning, through the application of the concept of "lifelong learning". Different definitions of the essence of "competence" are analyzed, which allows emphasizing that when choosing different forms of education, in particular, trainings, different types of training it is necessary to use / apply modern methods and techniques. It has been proven that incompetent non-use by a staff of their knowledge, skills, experience and skills often leads to reduced profits and inefficient use of their potential.

**Keywords:** competence, change, development, personnel, management, organization.

**JEL Classification:** M12, M53.

## 1. INTRODUCTION

The transformational changes taking place in the social and economic development of the country form the demand for highly qualified workers of the appropriate level and profile, capable of effective communication, creativity and responsibility in working in accordance with international standards.

In the age of the knowledge-based economy, education is the easiest way to increase the share of knowledge in the human capital system. Qualitative education and obtaining of qualifications allow you to maintain skills and easily adapt to a dynamic environment, greatly facilitating job search, higher income, thus allowing not only greater satisfaction of material needs, facilitating job search and appropriate approaches to it through the implementation of achievements of one's own needs. In modern business conditions for Ukrainian enterprises, the issue of "staff competence" is gaining importance, because to perform work of varying complexity at the enterprise requires new existing knowledge, skills and abilities.

At present, personnel, as a determining factor of development, forms the added value of a business entity, and its value depends on the competencies as the necessary knowledge and skills of an employee.

Despite the great interest in providing competencies for ensuring the professional level of a modern worker in accordance with the requirements of the labor market and the consequences of scientific and technical progress by both educational institutions and employers and employees themselves, insufficient attention is paid to the choice and application of modern methods of competencies. There exists a need in generalization of the existing methods which are not only aimed at learning, but also allow to connect this learning with modern information technologies, bringing the learning environment closer to the real conditions of professional activity.

## 2. LITERATURE REVIEW, GENERALIZATION OF MAIN STATEMENTS

Thanks to the scientific achievements of representatives of scientific and other schools, the concept of human capital was formed. A significant number of works by scientists, both Ukrainian and foreign, is devoted to the study of competencies of employees. We note only D. McClelland, S. Whiddett and S. Hollyfird, D. Dubois and W. Rothwell, etc., who note that one of the factors in improving the competence of staff is the use of effective forms and methods of training. The table 1 shows the statements of the above representatives.

| Division of competencies treated as human features | Source |
|---|---|
| Characteristics of employees, most often represented by Knowledge, Skills, Abilities and personality traits needed to do the job properly. | D. McClelland [1] |
| A set of features of a given person composed of motivation, personality features, skills, self-evaluation connected with functioning within a group and knowledge which the person acquired and uses. | S. Whiddett and S. Hollyfird [2] |
| Employee competencies include their interests, talents and predispositions, education and knowledge, experience and practical skills, internal motivation, attitudes and behaviours which are important in their professional work, health and psychophysical condition, having the formal right to act on behalf of a given organization, values and ethical principles. | T. Oleksyn [3] |
| Knowledge and skills but also more abstract types of competencies, i.e. patience, perseverance, flexibility and self-confidence. | D. Dubois and W. Rothwell [4] |

*Tab. 1. Competencies as a set of knowledge, skills and other competencies.*

## 3. DISCUSSION

It is worth noting that the concept of "development" in most philosophical dictionaries is defined as an irreversible, directed, natural change of material and ideal objects. It is emphasized that only the simultaneous presence of all three properties distinguishes the processes of development among other changes: the reversibility of changes characterizes the processes of functioning (cyclic reproduction of a constant system of functions); the absence of regularity is inherent in random processes of a catastrophic type; in the absence of direction, changes cannot accumulate, and therefore the process loses the characteristic for the development a single, internally interconnected line [5, p. 168].

Significant number of foreign scientists consider staff development as training and raising of qualification of the staff, and P. Schlender explains the development of human resources as a system of measures aimed at supporting capable for education workers, dissemination of knowledge and the best experience, training of young qualified employees [6, p. 126].

According to F. Khmil, staff development is a repetitive process that leads to the achievement of such indicators of the level of qualification of employees that correspond to the development strategy of an organization [7, p. 325]. V. Lukyanikhin argues that staff development is a systematically organized process of continuous professional training of employees for preparation of them for new production functions, professional development, formation of a reserve of managers and improving the social structure of staff [8, p. 464].

All of the above gives the possibility to say that development acts as a qualitative change of stable states, and the process of development management is carried out through changes in the state of the internal and external environment. As L. Clark notes, "a common mistake of many organizations is to underestimate the impact of changes on people" [9, p. 9].

Technological changes require new approaches from both employees and managers. Employees demand appropriate working conditions, a motivational environment, and the creation of comfortable recreation areas, opportunities for development, continuous improvement and career growth. Employers require employees to be committed, have the appropriate skills, participate in the life of the organization, perform their work well, readiness to use creative approaches to improve the level of economic activity of an enterprise.

There is a constant need for enterprises in increasing staff development, for this reason, first of all, there is a need for a quality workforce. Therefore, the most important factor in the effective operation of an enterprise is the continuous retraining of staff, which requires companies to constantly invest in staff. There is a direct relationship between an employee's qualifications and the efficiency of his work: the higher is his rank, the higher is his productivity. More skilled workers learn new equipment, technology, methods of labor organization faster and more efficiently. Just this largely determines the higher degree of satisfaction with their work [10; 11].

It should be noted that the acquired competencies, taking into account the stated components, are necessary to be constantly improved. The best way to assess a person's competence is to determine the degree of acquisition of a certain competence in a certain field of human activity.

The most precise, from the position of management and development, D. McClelland [1] singles out "competence as the ability of a company and its staff to perform necessary functional responsibilities in accordance with a particular vision, mission, and values". The scientist identifies three main components of competence:
- cognitive (the presence of a system of professional and special subject knowledge),
- functional (possession of methods, technologies, algorithms for performing actions),
- personal component (ethical and social positions and settings, attitudes to performing action) [12; 13].

Thus, the development of competence is associated with both the physiological properties of a man, his professional activities and methods of ensuring such development. In the global world, the competency model according to Maxwell is one of the ideal foundations for the development of staff competencies, despite the great variety of modern methods and concepts that characterize the theory of

competency development.

In this connection, the question of choosing methods and models for the development of employee competencies is very actual. To train a competitive, competent, socially mature, highly professional and responsible specialist who is able to navigate and work successfully in modern conditions. Today it is extremely difficult to create a single model for all organizations for development of competencies, due to the peculiarities of industry activities, areas of the development, size, etc. [14]. Therefore, personnel development management based on the competency approach assumes that each organization can develop individual models of competency development, as well as choose the relevant methodological, organizational, informational and motivational support of the competency approach.

Table 2 [15] presents modern and traditional models, techniques and tools of personnel management, which allows you to clearly assess the difference in approaches to managing the competence of employees.

| Areas of employee competence management | Traditional methods, techniques and tools for competence management | Modern methods, techniques and tools for competence management |
|---|---|---|
| **Identification of employee competencies** | **Methods:**<br>– method of analysing HR documentation<br>– method of observation at the workplace<br>– diagnostic survey method<br>– method of designing competence profiles<br>– method of designing the reference model for job positions<br>**Techniques:**<br>– technique of examining archival materials<br>– technique of observing an employee while they perform their tasks<br>– the interview technique<br>– the survey technique<br>– job interview<br>**Tools:**<br>– interview questionnaires<br>– competency questionnaires<br>– competency sheet<br>– reference models sheets<br>– Curriculum Vitae and cover letter<br>– job cards<br>– personality tests<br>– talent and skills tests | **Methods:**<br>– networking<br>– Assessment Centre<br>– psycho-graphology.<br>**Techniques:**<br>– online job interviews<br>– the online interview technique<br>– the web-assisted survey technique<br>**Tools:**<br>– e-Recruiter<br>– e-interview questionnaires<br>– e-reference models<br>– system.zawodowcy.org<br>– projective tests |

| Areas of employee competence management | Traditional methods, techniques and tools for competence management | Modern methods, techniques and tools for competence management |
|---|---|---|
| **Evaluation of employee competencies** | **Methods:**<br>– 180/270/360 degree methods<br>– observation method<br>– work performance analysis method<br>– method of observation of an experienced employee's behaviour at work<br>– critical cases method<br>**Techniques:**<br>– ranking<br>– pair comparison technique<br>– normal distribution technique<br>– descriptive assessment<br>– behavioural interview<br>– working sessions with experts<br>**Tools:**<br>– competency tests,<br>– tests of knowledge and skills<br>– practical tests<br>– situational tests<br>– work analysis questionnaires<br>– exercise questionnaires | **Methods:**<br>– networking<br>– Assessment Centre<br>**Tools:**<br>– e-interview questionnaires<br>– e-reference models<br>– system.zawodowcy.org<br>– simulation tests |
| **Development of employee competencies** | **Methods:**<br>– problem lectures<br>– on-the-job training<br>– job substitutions<br>– job rotation<br>– case analysis<br>– taking part in training in a given scope<br>– participation in workshops<br>– natural social training<br>– self-improvement<br>**Techniques:**<br>– attempts at performing tasks differently than before,<br>– group discussions<br>– consultations with the superior<br>– peer observation and feedback<br>– observation of actual or simulated tasks<br>– work samples<br>– imitating people who succeeded in a given area.<br>**Tools:**<br>– so-called "paper and pencil" test<br>– psychometric tests<br>– self-assessment questionnaires,<br>– competency profiles | **Methods:**<br>– networking<br>– Development Center<br>– Benchmarking<br>– Coaching<br>– Mentoring<br>– Blended learning<br>– implementation of team projects<br>– virtual teams<br>– e-learning with the use of multimedia techniques<br>– spatial games<br>– role-playing with the use of IT techniques,<br>– simulations with the use of IT techniques,<br>– counselling,<br>– domestic and foreign study visits,<br>– information discussions, meetings, exchange of views and experience<br>**Techniques:**<br>– videoconferences<br>– simulation exercises<br>– specialist instruction<br>**Tools:**<br>– e-reference models<br>– system.zawodowcy.org<br>– training programs |

*Tab. 2. Traditional and modern methods, techniques and tools for employee competence management [15].*

The presented methods and tools for managing the competence of the organization can be used at all stages of human resource management, combining them with modern technologies.

Competencies aimed at ensuring taking into account both a combination of "hard skills" that enable an employee to perform his functions and "soft skills" that make the process of implementing hard skills more effective. Such combination allows using the acquired knowledge to perform specific tasks in the workplace in a particular professional activity. To date, the world practice has developed a large list of methods used to develop skills and abilities, including: discussions, brainstorming, Oxford debates, Case-study, business and role-playing games, workshops, communication and management training. The stated methods significantly expand the educational opportunities of established forms of classes (lectures, seminars) [16].

We can note that the development of professional competencies is possible only under certain conditions. The components of continuous development of professional competence of the personnel of the organizations for effective functioning of the personnel management system with its subsystems are described below. S. Kis suggests to the management of enterprises to consider the following competence components when carrying out changes [17]:

-   to stimulate the innovative ability of the management and executive staff;
-   to maintain the readiness of the company's staff for continuous training and self-development;
-   to promote professional and psychological readiness of the company's staff for constant change;
-   to use modern management technologies aimed at the formation of intellectual organizations;
-   to improve the leadership qualities of the management staff, to promote their readiness to create effective teams;
-   to increase the degree of involvement of performers in management and ensure its career growth based on the results of work.

V. Kolomiets [18] draws attention to the following competency factors in his work: the competitiveness of staff in an enterprise, the dynamics and mechanism of change that affect the processes taking place in an enterprise and beyond. This impact can be both positive and negative, respectively, competitiveness can increase or decrease. The author also offers a classification of factors to ensure the growth of competitiveness of personnel of an enterprise based on: nature of occurrence, level of influence. According to the levels of influence, the factors of the internal and external environment are distinguished. The staff cannot change the external environment of the company, but they must take it into account in their activities. The internal environment depends directly on the staff; it is under its direct influence and is its characteristics. By the nature of origin, organizational, innovative, social and economic, cultural, social and psychological, demographic factors are distinguished.

The advantages of developing methods for the development of professional competence of the staff allow fairly assessing the staff and creating a basis for planning their further training and development, improving the management system of competence, introducing new methods of staff assessment (skills, knowledge, personal characteristics, etc.) the organization can achieve a real advantage over competitors.

Among many tools for acquiring new and improving the existing competencies, the most commonly used method of staff development is training and coaching.

In particular, coaching is considered to be a very effective method which due to the close contact between the mentor and the trainee most effectively contributes to the individual improvement of employee skills, through the interaction of a coach, i.e. a trainer and student.

To achieve the goals of the organization in staff development, in particular through a competent approach, it is proposed to use the SMART method. This method allows the staff to disclose their knowledge and skills to achieve goals and objectives through the coach. The SMART method, according to experts, is quite effective because it allows you to improve personal contact of the coach with a person-employee who has some experience and knowledge. SMART is a mnemonic abbreviation used in project management, management, personal development, as a criterion for evaluating a task or a goal. The resulting name SMART is derived from English words: Specific, Measurable, Attainable, Relevant, Time-bound, in this case, the acquisition of those competencies required by the employee and the organization where he works [19].

According to this method, each of the participants of the training has the opportunity to check the compliance of his goals and objectives through participation in the training which will testify to the different levels of acquisition or improvement of competencies required for the employee.

It should be noted that the application of the SMART method in the acquisition of competencies significantly expands the possibilities of short-term learning, through the use of the concept called "lifelong learning" - "lifelong learning" [20].

In addition, such training can be carried out in various ways, in particular through:
- formal learning;
- non-formal learning;
- outside of institutional learning (informal learning) [21].

Thus, the above allows forming a model of the acquisition of competencies, which includes specific ways of acquiring the necessary knowledge and skills for effective professional activity.

Thus, in modern conditions, the choice of a method of acquiring competencies involves the selection of tools to increase the level of professionalism of employees and their contribution to the effective functioning of the organization.

The advantages of using these methods of acquiring competencies by employees are not only the ability to improve the competencies of the employee, but also to create the prerequisites for planning the development of personnel of the organization as a whole.

## 4. CONCLUSIONS

Thus, in modern conditions the choice and application of methods of acquisition of competencies as the main component of development of the personnel of an enterprise acquire importance. The development of competencies is based on the creation of appropriate conditions for staff development. The choice of the method of acquiring competencies allows you to choose those competencies and methods of their acquisition that correspond to the individual characteristics of organizations. The method of acquiring SMART competencies allows determining the competencies of the staff, to form the need for the use of modern analytical and behavioral skills, by providing greater opportunities for management skills and flexibility, dialectical thinking, the ability to make creative decisions in unusual situations.

From my own experience, I think it is appropriate to offer a few more important characteristics that play an important role in the process of change and are able to influence the process of change. These are the characteristics that an employee must meet and which reflect his personal goals, stress, level of experience and competence, reliability, intelligence, ability to influence, knowledge of technology regarding the goals of their joint actions with effective and successful changes.

The main advantage of the proposed models of management of human resource behavior of an organization is, in our opinion, the possibility to obtain and use for explanations the latest goals and prospects of these actions, qualitative and quantitative analytical assessments and calculations of the proposed changes, but also planning necessary actions for informed management. leader motivation, integration and harmonization of goals and interests of the organization with optimization of the use of its common intellectual resource potential, as well as development, adoption and implementation of necessary management decisions regarding the implementation, monitoring and evaluation of the change processes themselves and the results caused by them.

In today's conditions, the management of personnel development itself is one of the most important factors of enterprise stability in the market, so it should be based on a harmonious combination of personal, professional, social, moral and other human qualities. Improvement of which occurs under the influence of continuous acquisition of new knowledge and professional experience that a person acquires in the process of his life and the development of management skills.

## REFERENCES

[1] McClelland D. Testing for competence rather than for "intelligence". *American Psychologist*, *Harvard University*, **28** (1) (1973), 1-14.

[2] Whiddett S., Hollyforde, S. *Modele kompetencyjne w zarządzaniu zasobami ludzkimi*. Oficyna Ekonomiczna, Kraków, 2003. (in Poland)

[3] Oleksyn T. *Zarządzanie kompetencjami, teoria i praktyka*. Oficyna Ekonomiczna, Kraków, 2006. (in Poland)

[4] Dubois D.D., Rothwell, W.J. *Zarządzanie zasobami ludzkimi oparte na kompetencjach*, Wydawnictwo Helion, Gliwice, 2008. (in Poland).

[5] Podoprigora S. Ya., Podoprigora A. S. Philosophical Dictionary. Rostov n D.: Phoenix, 2012. (in Russian).

[6] Schlender P.E. *Personnel management*. M .: UNITIDANA, 2005. (in Ukrainian).

[7] Khmil F.I. *Personnel management: a textbook for students of higher educational institutions*. Kyiv Akademvydav, 2006. (in Ukrainian)

[8] Lukyanikhin V.O. *Personnel management*: *Teaching. way.* Sumy: *VTD* University Book, 2004. (in Ukraine)

[9] Clarke L., *Zarządzanie zmianą*, Wydawnictwo Gebethner & Ska, Warszawa, 2007. (in Poland)

[10] Voloboev I.O. Kompetenciji: klichovuj element upravlinnia liudskym kapitalom organizaciji.Zbirnyk naukovych prac Socialno-trudovi vidnosyny: teorija i praktyka. Available at: https://ir.kneu.edu.ua/bitstream/handle/2010/5659/ Voloboeva.pdf?sequence=1&isAllowed=y

[11] Upravlinnia rozvytkom personal. *Navchalnuj posibnyk.Za zag. redakcijeju M.S. Tatarevskoj*. Odesa: Atlant, 2013. (in Ukrainian)

[12] Jasińska J. *"Zmiany w organizacjach: sprawne zarządzanie, sytuacje kryzysowe i warunki osiągania sukcesu"*. *Monografia. Wydawnictwo FREL.* Warszawa, 2015. (in Poland)

[13] Karwala S. *Mentoring jako strategia wspierająca wszechstronny rozwój osobisty.Wyższa Szkoła Biznesu.* National Louis University, Nowy Sącz, 2009. Available at: http://mentoring.com.pl/Krzywa_Laffera.pdf.

[14] Bugdol M. *Zarządzanie pracownikami – klientami wewnętrznymi w organizacjach projakościowych. Wydawnictwo Difin.* Warszawa, 2011. (in Poland)

[15] Graczyk-Kucharska M., Spychała M., Goliński M., Szafrański M. *Challenges of modern human resource management*. Published by Instytutu Naukowo-Wydawniczego Spatium. Radom, 2020). (in Poland)

[16] Iza M.M., Pryxodchenko L.L. *Kompetentnisnuj pidxid – osnova zabezpechennia jakosti osvitnioj pidgotowky.* Available at: http://academy.gov.ua/pages/osn/2/news/99/files/konf.pdf.

[17] Kis S. Ya. Upravlinnia ekonomichnoju bezpekoju pidprujemstv naftogazovogo kompleksu: avtoreferat dusertaciji na zdobuttia naukovogo stupenia kandydata ekonomichnyx nauk, Ivano-Frankivsk, 2010. (in Ukrainian).

[18] Kolomiets V.M. Rozvytok konkurentospromognosti personalu mashynobudivnych pidprujemstv: avtoreferat dusertaciji na zdobuttia naukovogo stupenia kandydata ekonomichnyx nauk. Zaporizzia, 2008. (in Ukrainian)

[19] Szczepaniak K. *Zarządzanie zasobami ludzkimi.PWN*, Warszawa, 2007. (in Poland)

[20] Istorija, statistika i proznozy. Available at: http://www.trainings.ru/library/articles/?id=15267.

[21] Verbovska L. Management of Personnel Development in Conditions of Change. *Advances in Manufacturing II*, **3**, (2019), 207-217. doi: 10.1007/978-3-030-17269-5_15 (in Poland)

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В статті обґрунтовано основні складові вдосконалення компетенцій персоналу в умовах змін. Визначено, що врахування та поєднання "твердих (hard skills)" і "м'яких (soft skills)" навичок дозволяють використовувати набуті знання для виконання конкретних завдань на робочому місці у певній професійній діяльності. Представлено сучасні та традиційні моделі, прийоми та інструменти управління персоналом, відповідно до яких можна чітко оцінити відмінність у підходах до управління компетентністю працівників в умовах змін. На основі аналізу світової практики подано перелік методів: дискусії, мозкові атаки, оксфордські дебати, Case – Study, ділові і рольові ігри, практикуми, комунікаційні та управлінські тренінги, які застосовують для формування умінь та навичок працівників. Дані методи дозволяють розширити освітні можливості усталених форм проведення занять (лекцій, семінарів). Показано взаємозв'язок набуття нових та удосконалення існуючих компетенцій розвитку персоналу на основі тренування та коучингу. Запропоновані методи набуття компетенцій дозволяють обирати ті компетенції та методи їх набуття, які відповідають індивідуальним особливостям організацій. Доведено, що набуття компетенцій персоналом дозволяє визначити нові компетентності у працівників, сформувати потребу у використанні сучасних аналітичних та поведінкових навичок, надаючи більші можливості для управлінських навичок та гнучкості, діалектичного мислення, здатності приймати творчі рішення у незвичних ситуаціях. Обґрунтовано, що поєднання методу SMART у набутті компетенцій значно розширює можливості короткотермінового навчання, за рахунок застосування концепції "lifelong learning". Проаналізовано різні визначення сутності "компетенція", яке дозволяє зробити акцент, що при виборі різних форм навчання, зокрема, тренінгів, різних видів навчань необхідно використовувати/застосовувати сучасні методи та методики. Доведено, що невміле невикористання персоналом своїх знань, вмінь, досвіду та навичок, часто приводить до зменшення прибутку та неефективного використання їх потенціалу.

**Ключові слова:** інформаційні компетенції, зміни, розвиток, персонал, управління, організація.