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### COMPETENCY MODELS AND THEIR USE IN PRACTICE

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**Abstract.** *The purpose of this article is to present the role of competency models in human resources management and to attempt an assessment of the number of organisations in Poland that have implemented such models, and of their effectiveness. The nature of the competency models' role has been assessed based on a literature review. The scale of use of competency models by organisations has been evaluated using desk research as the research technique.*

*Sources of information consisted of the Study of Human Capital (Bilans Kapitału Ludzkiego) database by the Polish Agency for Enterprise Development (PARP) and reports from research conducted by the Institute of Business Development (IBR) and PARP. The conclusions are as follows: more*

*than half of the companies surveyed (50.6%) have no competency model, models of most companies (56%) that participated in the survey consisted of nine competencies and, according to the respondents, the models in their companies are average in terms of their effectiveness.*

**Keywords: competencies, competency models, human resource management**

## **Introduction**

In a knowledge-based economy, one of the tools relevant to personnel policy is a competency model. Its importance lies in the fact that it combines the organisation's strategy with the personal development of employees. One of the key factors behind the growing interest in competency models is the impact of employee competencies on the effectiveness of individuals, teams and entire companies. Conversely, poorly implemented competency models can be very expensive and lower the motivation of employees, as well as their performance and commitment [3, p. 98].

The development of a competency model is a difficult and painstaking analytical undertaking. It is possible to employ ready "competency libraries" or draw upon experiences of other companies, but only a "tailor-made" model fully meets the needs of employees and the organisation. The most effective competency models are those that have been developed during workshops with senior managers and representatives of employee groups [5, p. 93–102].

The purpose of this article is to present the role of competency models in human resources management and to attempt an assessment of the number of organisations in Poland that have implemented such models, and of their effectiveness. The article responds to research problems that have been included in the following questions:

1. What is the role of competency models in human resources management?
2. How many companies in Poland use competency models and how do they rate their effectiveness?
3. How are competency models developed?
4. What are the competency expectations in regards to employees in the near future?

In order to achieve the pursued objective and obtain answers to the research questions, an analysis of literature and statistical data contained in the reports prepared by the IRB (Business Development Institute) and PARP (Polish Agency for Enterprise Development) has been conducted. Mainly medium and large companies were of interest. The evaluation attempt and conclusions are based on desk research.

## **1. The nature and role of competency models in human resources management**

A competency model<sup>1</sup> is a set of important competencies required from the employees of a particular organisation. It converts the mission and operational philosophy into descriptions of employee behaviour [6, p. 70–72]. The primary objective of building competency models is to compare and evaluate the actual sets of employee competencies with competencies describing job requirements and identifying a competency gap on this basis. Taking into account the above objective, two types of competency models can be distinguished [10, p. 85–87]:

1. Models of desired competencies – describing desirable competencies of employees in connection with the company's business objective,
2. Models of present competences – describing existing competencies, i.e. those that employees have at the time of description.

Competencies are grouped into sets, applicable to specific positions in the organisation and called competency profiles. When building a specific competency profile, it has to be decided whether it will apply to universal competencies for the entire organisation or focus on specific competencies for particular positions. Within the organisational context, most definitions point to the strategic importance of competencies as elements of an organisation that determine its competitive advantage [4, p. 20–22]. Bratnicki [1, p. 14] points to the fact that in a modern economy, it is not so much the characteristics of products or markets which is decisive, but the ability to formulate intelligent strategic responses and to conduct efficient operations. Key competencies define distinctive abilities, processes and resources considered to be unique strategic resources. Focus placed on competencies universal for the entire organisation makes it possible to quickly develop and implement profiles, allowing development of traits that underlie the future success of the organisation as a whole [8, p. 47].

Meanwhile, development of competency profiles based on competencies used at individual positions is based on the belief that the competencies are related to a specific position rather than to the organisation and its culture. In an individual context the model is used to describe employee behaviours that contribute to the achievement of desired results by the organisation. In addition, it determines what knowledge and skills staff should have at different positions to be able to perform specific roles. Competencies are a result of knowledge and experience, but also personality, abilities, and even self-evaluation skills. It is worth noting that the idea is not only to demonstrate particular competencies, but to actually exhibit certain behaviour in the workplace. Such an approach allows better identification of real, necessary skills, which makes it possible to motivate employees to develop them [8, p. 47].

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<sup>1</sup> The first competency models were created in the UK and are associated with the creation of professional qualification standards (BTEC, 1990). As part of this project so-called National Managerial Standards were also created – these base competencies form the universal model of managerial competencies.

Accordingly, the organisation can, depending on its objectives, use one general competency model or numerous profiled competency structures.

A very important issue is to determine the optimal competency portfolio for an employee, taking into account the needs of the organisation, and then strive to obtain the missing competencies. Many people subscribe to the view that the optimum number of competencies is between eight and twelve [13, p. 20–25].

A competency model makes it possible to regroup various competency profiles within the organisation into the following areas [8, p. 47–48]:

- key competencies – reflect the organisation's strategy and culture, constitute the basis for comparing all employees in the organisation, they are common to all employees.

- specialised competencies for the role/level in the hierarchy – allow a comparison of employees who perform the same roles within the organisation or occupy positions at the same level in the hierarchy, support the development of a system of horizontal promotions.

- specialised competencies for functions/positions – consist in basing competency profiles on positions existing in the organisation.

A comprehensive competency model contains information not only about competencies and their desired level, but also the importance of further competencies applicable to the role or position (position-based or corporate competency, etc.), and also identifies the means for their measurement [2, p. 25]. In order to create competency models it is necessary to: engage employees in the construction of competency profiles, keep employees informed in regards to actions taken and their causes, ensure that the competency model is adequate for the intended uses and purposes, and the competencies reflect the nature of particular positions and roles [12, p. 67–68].

When building competency models, the following measures need to be taken [13, p. 62–65]:

- obtaining the support of key people in the organisation,
- clearly defining the aim of the model's creation,
- developing a project implementation plan,
- appointing a team tasked with collecting and analysing data,
- identifying competencies that best describe a particular position,
- presenting a list of competencies,
- selecting competencies included in the profile being constructed,
- preparing final competency descriptions,
- verifying the viability of the competency model, modifying and implementing the competency model.

A competency model is a tool that can be used in many areas of HR, including developing plans for training and development, recruitment, periodic evaluations, a bonus and incentive system, career paths, or an Assessment and Development Centre. Competency models facilitate integrated human resources management through the use of a single, common set of decision-making criteria in all personnel-related processes [7, p. 76–77]. A professionally prepared competency model can increase the effectiveness of actions taken by a company, while allowing employees to increase their effectiveness on the job.

## **2. The use of competency models in practice – IBR report**

The research was conducted by the Institute of Business Development (IBR) in the period from January to April 2010 in the form of an online questionnaire. The survey was addressed to HR employees and concerned the effectiveness of competency models. It was prepared in two versions, both for companies without a working competency model (questionnaire 1) and for organisations that have such a model (questionnaire 2). The object of the study was, among other things, methods for constructing the model, the content and the use competency models in organisations. Statistical analysis was based on data from 79 companies, of which more than half (50.6%) did not have a competency model. Respondents represented companies of various sizes, most of them employing more than 249 workers.

The survey shows that companies with implemented competency models in most cases (55%) construct them in cooperation with consultants or alone (45%). Companies don't outsource these activities; neither do they purchase ready-made models. The study shows that these organisations want to have a real and significant impact on the shape of the model. This stems from the need to match competencies to a particular organisation. However, there are concerns that models created by the organisation itself, which has been declared by nearly half of the respondents, don't meet the requirements of such tools.

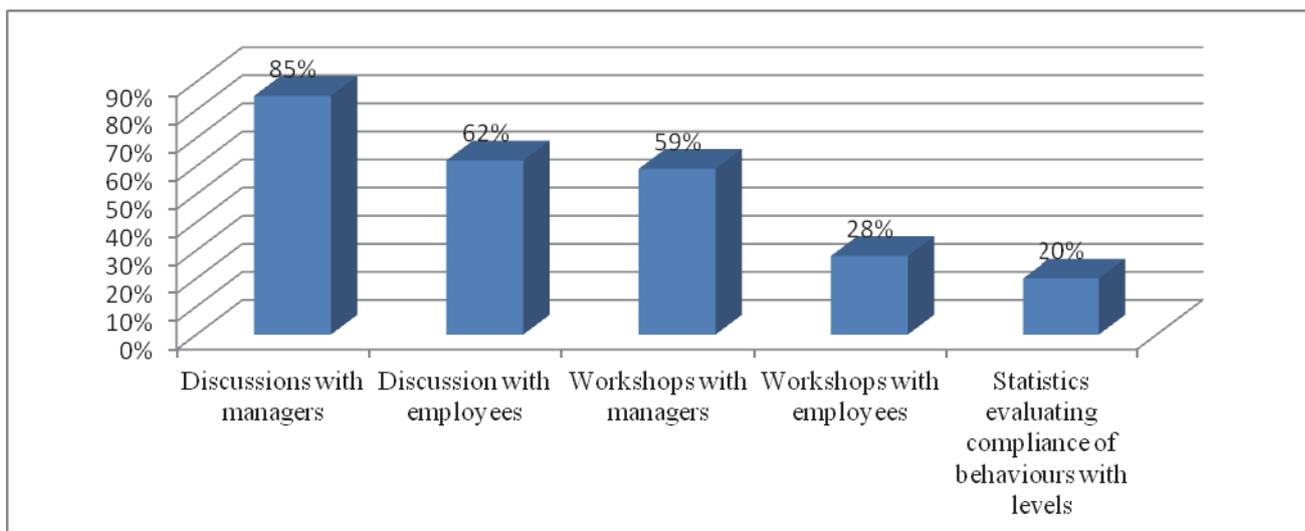
As acknowledged by the majority of respondents, models are created with input from managers, mainly using interviews or workshops (Fig. 1). Relatively few companies take advantage of workshops with employees (38%), while few, only one in five (20%) use statistical analysis.

Collecting information from senior management is an effective and recommendable practice. This allows two desired effects to be achieved [3, p. 121]:

1. Gaining knowledge about the future direction of the organisation and linking the competency model to the organisation's strategy,
2. Providing management support for activities related to the construction of a model.

However, it is alarming that few companies participating in the study took advantage of statistical methods and they do not perform quantitative research that would allow verification of the agreed quality levels and classification of behaviours in a competency model. This is a very important element, as it provides information on whether the model used is effective.

When creating an effective competency model, it is necessary to take into account the objectives that influence the organisation's long-term development. Individual competencies must be linked with the organisation's mission and objectives. Table 1 shows answers to questions concerning the construction of a competency model. Asked whether the company's strategy was taken into account, 85% of respondents answered yes. This is a satisfactory result, but it is worth considering the quality of these strategies and whether they can be used as a base for building effective competency models.



**Fig. 1. Methods used to build a competency model\***

\*Source: Research reports, <http://ibd.pl/wiedza-dla-biznesu/skutecznosc-modeli-kompetencyjnych/> (26.08.2016).

### 1. Answers of respondents to questions on how the competency model was constructed\*

Method of competency model construction	Answers of respondents in %		
	Yes	No	I do not know
Was the company's strategy taken into account when the model was constructed?	85	7	8
Does the model contain competencies for all position groups?	93	7	0
Do the competencies have a "0" level (i.e. lack of a given competency)?	38	57	5

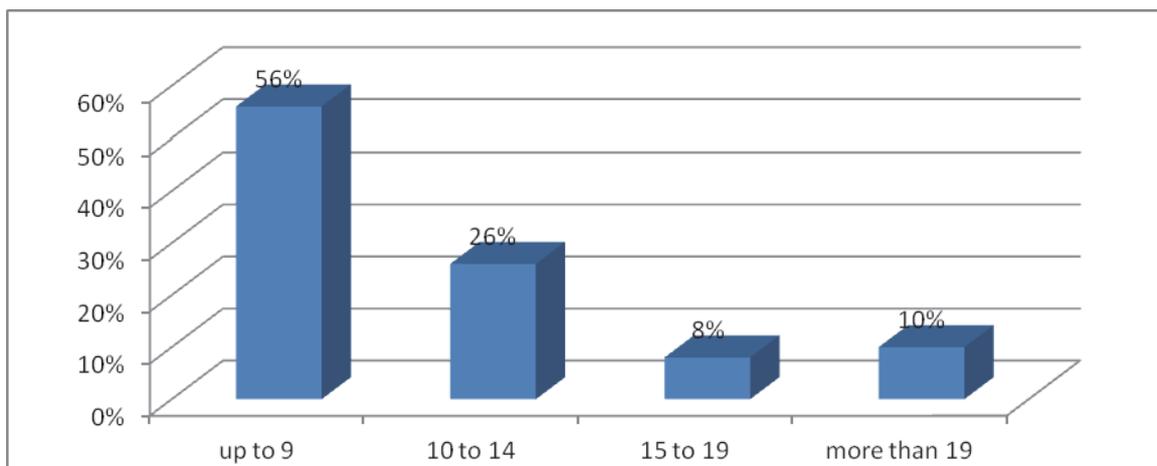
\*Source: Research reports, <http://ibd.pl/wiedza-dla-biznesu/skutecznosc-modeli-kompetencyjnych/> (26.08.2016).

Another important issue is the use of a universal set of competencies in the model. As many as 93% said the models they have taken into account competencies common to all groups of positions in this case (universal and common competencies), which yields a high usability of the competency model. Competencies can then be used for various positions within the organisation and for different purposes, and not, as in the case of a traditional position analysis, primarily for employee selection.

More than half of the respondents indicated that the models their companies have lack a so-called zero competency level. The authors of many publications suggest that the measurement of competencies should start at the average level. However, if the description of competencies features no zero point, the choice of average instead of zero gives incorrect information. This level is very important, especially in the application of a competency model in the selection process or as part of an assessment system [3, p. 97].

Answers to questions about the contents of the model suggest that the majority of represented companies have a model that serves its purpose. More than half of the respondents have declared that their competency models have – aside from the basic requirement for defining competencies – behaviour descriptions varying in terms of quantity (e.g. low – medium – high level of innovation). The respondents also declared that the competencies are assigned to individual position groups and that competency profiles are created (an appropriate level of select competencies has been set for particular position groups). The quality level occurs rarely, with only 42% of respondents. The determination of quality levels for individual competencies is more labour-intensive, but allows a more accurate and reliable assessment of employee behaviours. This is very important, if the organisation uses a competency model in development activities or when it informs employees about their individual competency levels.

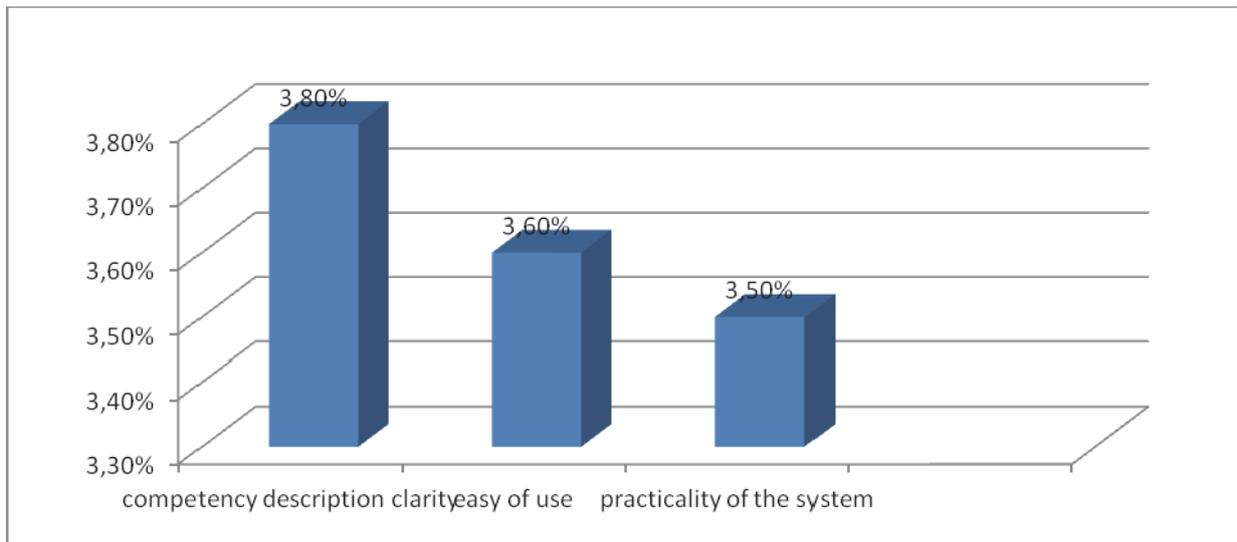
An excessive number of competencies leads to difficulties in their distinction. An extensive model is incomprehensible to employees, raises their concerns and aversion, which often results in failure in its implementation [13, p. 25]. The models for most companies (56%) that participated in the research had nine competencies; only 18% of the companies had models containing more than 15 competencies (Fig. 2).



**Fig. 2. Number of competencies contained in the competency model\***

\*Source: Research reports, <http://ibd.pl/wiedza-dla-biznesu/skutecznosc-modeli-kompetencyjnych/> (26.08.2016).

The question concerning the model's functionality uses three aspects: clarity of the competency's description, ease of use and practicality of the system. In the opinion of respondents, the models existing in their companies are average: 3.5-3.8 (maximum score was 5 – very good) Fig. 3. There was a slight variation between the different aspects.



**Fig. 3. Competency model rating by respondents\***

1 – very poor; 2 – poor; 3 – average; 4 – good; 5 –very good;

\*Source: Research reports, <http://ibd.pl/wiedza-dla-biznesu/skutecznosc-modeli-kompetencyjnych/> (26.08.2016).

Based on statistical analysis (student's t-test) a number of factors have been isolated that differentiate the assessment of the competency model's functionality. The subjects evaluate the functionality of the model higher, if [16, p. 4]:

1. Competencies have an assigned "0" level;
2. Behaviour levels vary qualitatively and quantitatively;
3. Behaviours are strictly assigned to the levels of each competency;
4. Competencies are not dedicated to particular position groups.

### **3. Competency requirements for employees**

The employers' level of satisfaction with the competency level of employees is assessed each year as part of the Study of Human Capital (Bilans Kapitału Ludzkiego; BKL) performed by PARP. Therefore, an analysis was conducted on the basis of data from this on the use of competency rating systems in companies and on the employers' satisfaction with their employees' competencies. The data is contained in Table 2.

In the group of medium-sized companies (employing up to 249 people), this percentage applies to more than 1/3 of respondents (approx. 35%). In the group of large companies (employing over 250 people) this percentage is much lower, 25 % in 2014, prompting the companies to take actions to improve employees' competencies. Within the scope of competency assessment systems, large companies show more interest (approx. 49%) than medium-sized companies (approx. 31%). However, in both groups the increase in interest regarding assessment of competencies is very slow.

## 2. Employees' degree of satisfaction (%) with the level of competency of employees\*

Company size	Subsequent years		
	2012	2013	2014
Companies employing 50-249 people (Number of entities in the study)	(1,836)	(1,615)	(1,608)
Employers satisfied with the level of their employees' competencies	32	35	37
Use of a competency assessment system	30.6	30.8	31.2
Companies employing 250 people or more (number of entities in the study)	(1,065)	(745)	(612)
Employers satisfied with the level of their employees' competencies	29	21	25
Use of a competency assessment system	48.9	49.8	49.3

\*Source: own study based on BKL data, <https://bkl.parp.gov.pl/backend/354/prezentacja-danych.html#> (03.08.2016).

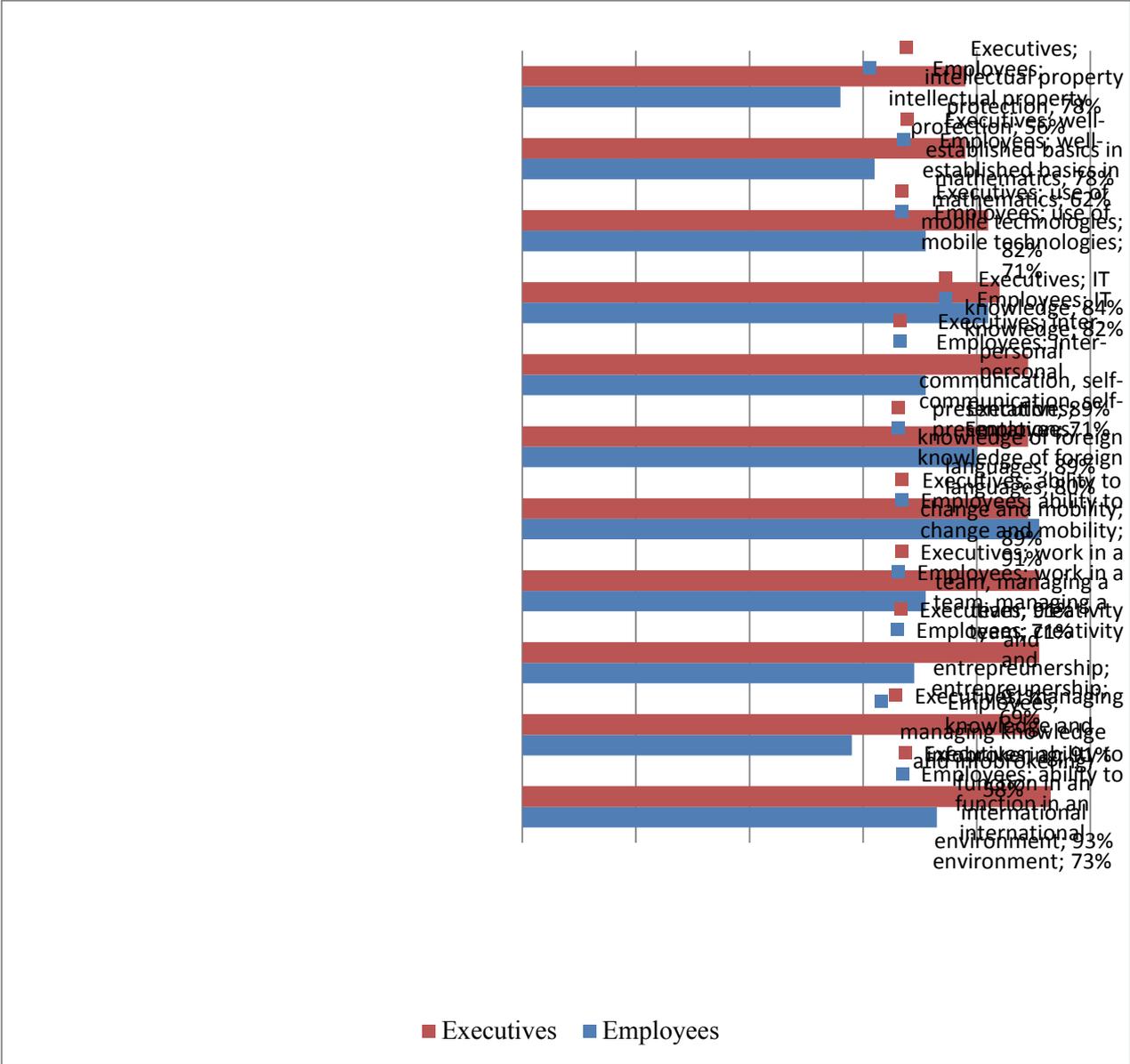
Changes in the labour market will affect the type of skills and competencies needed in the future. To respond to the challenges of the labour market and the economy in the coming years, the “Foresight of employees in a modern economy” (Foresight kadr nowoczesnej gospodarki) report was developed by a team of experts from various fields commissioned by the Polish Agency for Enterprise Development. The report presented the assumed scenarios for the development of the Polish labour market by 2020. The authors placed particular focus on answering questions about which professions and competencies will be the most sought after by employers.

The “Foresight of employees in a modern economy” project aimed to identify the needs of the Polish economy in regards to the skills of managers and employees of companies in the long term. The “Foresight of employees in a modern economy” project used a variety of research tools – expert panels, SWOT and PEST analyses, a Delphi survey and the construction of scenarios [9, p. 7–10]. A group of independent experts identified eleven core competencies. Their distribution is different for executives and for other employees (cf. Fig. 4).

The data shows that these competencies are largely associated with changes in the modern world. More and more companies will be operating on the international arena, so employees should be able to co-operate freely within international teams. This requires knowledge of foreign languages and mobile technologies used in communication. This is especially important for executives. In the future, we will have to deal with an increasingly uncertain labour market, meaning that employees must be multifunctional, capable of frequent changes in duties, and even positions.

This is already evident, especially in small businesses, which often need to “move” employees from one task to another. Employees must be flexible in relation to tasks entrusted to them, which places “over-qualification” and mobility high in the ranking of expected competencies. It is a competency especially sought after among employees. In the future, we will be receiving more and more information,

which we will need to filter, so employees will need to demonstrate knowledge of information technology and an ability to manage knowledge. It is worth noting that the presented competencies are universal and necessary for most positions, but will be required of executives to a greater degree, so one should consider their improvement [14, p. 164–167].



**Fig. 4. Expectations of competencies in regards to executives and employees in Poland\***

\*Source: own study based on [9, p. 117–142].

The above-mentioned competencies will be particularly important for employers offering employment in many future-proof occupations and specialisations. The list of future professions, which can be found in the report, includes, among other things [11, p. 27–35],

- 1) professions related to the use of information and communication technologies, not just developers, but also people who can creatively use technology in administration, education, science and culture;
- 2) together with the development of a knowledge-based economy that requires continuous learning and the ability to retrain, to grow the demand for instructors, trainers, coaches, employment consultants and professional guidance;
- 3) in the field of biotechnology, an increased demand will be observed for personnel competent in such fields as healthy food production, environmental protection, including people responsible for handling equipment, processing natural energy and the treatment of waste.

### **Summary and conclusions**

Both the research results, as well as the growing number of publications on competency management point to the growing popularity and importance of competency models in companies. Companies implementing competency models are able to better manage their employees, make more productive use of skills possessed by employees, choose the training system with more precision, as well plan recruitment in a more conscious manner. However, research shows that more than half of the companies surveyed (50.6%) do not have a competency model. Companies with implemented competency models in most cases (55%) construct them in cooperation with consultants or alone (45%). Due to this there are concerns that models created by the organisation itself (which has been declared by nearly half of the respondents) don't meet the requirements of such tools.

As acknowledged by the majority of respondents, models are created with managers, mainly using interviews (85%) or workshops (59%). Relatively few companies take advantage of employees (38%), while few, only one in five (20%) use statistical analysis. The models for most companies (56%) that participated in the research had nine competencies. In the opinion of respondents the models existing in their companies are average: 3.5-3.8 (maximum score was 5) in terms of efficiency.

The labour market is unstable and new professions are appearing all the time. Forecasts for growth in demand for specific employees change dramatically in a short time. In fact, it is difficult to predict which professional skills will be sought by employers. Therefore, rather than focusing on jobs that might be performed in the future, it is worth looking at the required competencies. The key ones are: the possibility of retraining, mobility, ability to manage knowledge, information and communication technology, creativity and entrepreneurship, teamwork, knowledge of foreign languages, as well as the ability to function in an international environment.

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## **МОДЕЛІ КОМПЕТЕНЦІЇ ТА ЇХ ВИКОРИСТАННЯ НА ПРАКТИЦІ**

### **Б. Виржиковська**

**Анотація.** Представлено роль моделей компетенції у сфері управління людськими ресурсами та зроблено спробу оцінити ті організації в Польщі, де було впроваджено такі моделі, а також оцінити їх ефективність. Характер ролі моделей компетенції оцінювався на підставі огляду літератури. Масштаби використання моделей компетенції організацій оцінювали за допомогою розробки статистичної документації як методу дослідження.

*Джерела інформації склалися з «Вивчення людського капіталу», даних Польського агентства з розвитку підприємництва (PARP) і звітів із досліджень, проведених Інститутом розвитку бізнесу (IBR). Висновки наступні: понад половина опитаних компаній (50,6%) не використовують моделі компетенції, а моделі більшості компаній (56%), які брали участь в опитуванні, склалися з дев'яти компетенцій і, на думку респондентів, моделі, використовувані в їх компаніях, є середніми з точки зору їх ефективності.*

**Ключові слова:** *компетенції, моделі компетенцій, управління людськими ресурсами*

## **МОДЕЛИ КОМПЕТЕНЦИИ И ИХ ИСПОЛЬЗОВАНИЕ НА ПРАКТИКЕ**

### **Б. Выржиковска**

**Аннотация.** *Представлена роль моделей компетенции в области управления человеческими ресурсами и сделана попытка оценить те организации в Польше, где были внедрены такие модели, а также оценить их эффективность. Характер роли моделей компетенции оценивался на основании обзора литературы. Масштабы использования моделей компетенции организаций оценивали с помощью разработки статистической документации в качестве метода исследования.*

*Источники информации состояли из «Изучения человеческого капитала», данных Польского агентства по развитию предпринимательства (PARP) и отчетов из исследований, проведенных Институтом развития бизнеса (IBR). Выводы таковы: более половины опрошенных компаний (50,6%) не используют модели компетенции, а модели большинства компаний (56%), принимавших участие в опросе, состояли из девяти компетенций и, по мнению респондентов, модели, используемые в их компаниях, являются средними, с точки зрения их эффективности.*

**Ключевые слова:** *компетенции, модели компетенций, управление человеческими ресурсами*