Application of Competence Models in Performance Measurement Systems

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The article addresses the topic of organizational effectiveness and deals with the use of competence models in performance measurement systems. Performance measurement is a multi-faceted and multipartite phenomenon. It should reflect organizational and individual performance level, different perspectives, reflecting the past, the present and the future. All these aspects and perspectives are in cause-effect relationship and measured in different dimensions. The learning and growth perspective is very unique as it presents the future and using competence models to reflect it can bridge the individual performance level with organizational as well as performance future aspect with present and past.

Keywords: competency, competency model, effectiveness, performance measurement.

Introduction

Many authors state that the internal factors such as human resources have particular significance for organization's competitiveness, when markets, the financial capital and globalization are losing previously held importance (Younndt, 1996).

Andy Neely (Neely, 1995) defines effectiveness as the extent to which customer needs are met, while efficiency shows how economically organization's resources are used. A well-known Peter Druker saying reads "efficiency is to do things right and effectiveness – to do right things". However, trying to define the efficiency more strictly we deal with the same difficulties Basil Georgopoulos and Arnold Tannenbaum (Georgopoulos, Tannenbaum, 1957) encountered. Their noticed that the effectiveness of the organizations is the most complicated and least examined issue concerning the organization theory. This is partly determined by

lack of general organizational effectiveness criteria when researchers select criteria a priori, keeping them intuitively correct, without trying to systematize them.

What is appropriate for one organization can be completely unacceptable for another, since effectiveness is associated with the achievement of goals. Even such a seemingly clear objective as an organization's profitability, depending on what period it is set – for long-term or short-term, can completely mess up the understanding of what is considered to be effective and what ineffective. Organizational effectiveness as well as human resources management effectiveness lies in an organization's overall strategy. In this context performance measurement of each individual person in organization becomes even more difficult, but at the same time it stays the cornerstone not only for the estimation of human resources management efficiency but as well for the assessment of the whole organization's effectiveness.

In this area there is a large variety of methods and criteria – how and what indicators to choose, how to relate them to each other. Performance measurement moves from a simple set of performance indicators towards the complex performance measurement systems, where not only achieved results are measured or the current situation is assessed, but also organization's preparation for the future is diagnosed.

Employee future performance prediction is closely linked to the growing popularity of research in competence management. Employee competence gradually occupies a central place in all human resources management areas. Competence models are being used in employee selection and recruitment, development, performance appraisal and compensation systems. Many authors (Dubois, Rothwell, 2004) believe that human resources management passes through significant transformations and faces much wider perspective due to development of more adequate competence models and more reliable and successful competence assessment methodologies.

The rapid progress in this area allows to speak about the competence-based human resources management (Bratton, Gold, 2007, page 55). Jay Barney (Barney, 1991) argues that sustainable competitive advantage of the organization is achieved not through the analysis of the situation in the external market, but through in-depth analysis of the competences that competitors cannot imitate.

The main aim of the article an analysis of using competences in performance measurement systems. It could be useful in linking measurement on the individual performance level with organizational as well as performance future aspect the present and the past. Organizational performance is assumed not only as the whole organization's performance, but also as any subdivision, any system or any team within the organization.

Effectiveness related problems

To say whether the organization moves toward its strategic goals and how quickly it does so is possible only by measuring it.

For a long time organizations have been using only financial indicators and this was the main criterion of success and the main tool of control. However, financial indicators have a serious drawback – they only reflect if the company was successful in the past.

It is evident that contemporary organizations are acting under constantly changing and increasingly sophisticated external conditions, but nevertheless adequate and better reflecting reality performance measurement is still underestimated in practice. Accelerating pace of life enforces organizations to look for other measures and indicators that could help them to reflect better current situation, and researchers in response began to pay more attention to non-financial performance indicators that allow companies to track the processes of pursuing both strategic and short-term goals.

Some management scholars have created methods which, because of their complexity, have never been applied in practice and, therefore, interest in them quickly subsided. On the other hand, the desire to get a quick tangible practical results using a very simplified and seemingly very comfortable to apply practically methods where the adequacy to the truth in the name of simplicity was almost lost, did not bring anything without frustration, either. It is a typical situation for many areas of management, and organizational effectiveness, which studied for decades, are not the exception. Different authors at different times emphasized impact of one or another factor on an organization's success, however, a panacea has not been discovered. Almost a quarter of century ago S. Kim Cameron (Cameron, 1986) attempted to summarize some statements that define efficiency, which have almost been not disputed by now:

1. Despite the ambiguity and complexity, the construct of organizational effectiveness is central to the organizational sciences and cannot be ignored in theory and research.
2. Because no conceptualization of any organization is comprehensive, no conceptualization of an effective organization is comprehensive.
3. It is impossible to define the best or sufficient set of indicators of effectiveness. Criteria are based on the values and preferences of individuals, and no specifiable construct boundaries exist.
4. Different models of effectiveness are useful for research in different circumstances. Their usefulness depends on the purposes and constraints placed on the organizational effectiveness investigation.

5. Organizational effectiveness is a problem-driven rather than a theory-driven construct.

Richard M. Steers (Steers, 1975) reviewed 17 different models of organizational effectiveness and divided them into two groups: normative models (also called prescriptive) – which try to specify what the organization must fulfil in order to become effective and descriptive models – which attempt to summarize characteristics of the effectively functioning organizations.

If a competence model as a person's effectiveness model is considered, it would be interesting to note that the competence model at the time of its creation is to be regarded as descriptive as it summarizes characteristics of the effectively acting persons, but in the later stages, using it in selection, recruitment, performance evaluation, etc. it could be rather considered as a prescriptive, as it tries to specify what the person must fulfil in order to become effective. The uniqueness of the competence model is that it combines the past and future effectiveness.

R. M. Steers summarizing the results obtained from the studies of 8 different models pointed out eight problematic aspects, which significantly reduce practical applicability of the models:

1. Validity of Construct "Effectiveness", which, according to the author is more abstract idea than a concrete phenomenon.
2. Criterion stability.
3. Time perspective. Different indicators to define short-, medium- or long-term period effectiveness.
4. Multiple Criteria – along with the advantage of comprehensiveness provided by multiple criteria they represent a major weakness where such criteria are in conflict with one another.
5. Precision of Measurement.
6. Generalizability – the possibility to use the same criteria for many organizations. Criteria which are suitable for large corporations may seem completely useless for public sector institutions and non-profit organizations.
7. Theoretical Relevance – if these models do not contribute to a deeper understanding of organizational behaviour, structure and processes, they are of little value in a theoretical point of view.
8. Level of Analysis – the majority of macro-efficiency models are ignoring the relationship between the individual employee performance and effectiveness of whole organization.

Employee competence studies could serve as a valuable insight relating individual's competence as the micro level indicator of the performance with the macro-level (overall performance).

It can be very difficult to squeeze such a multifaceted and multidimensional phenomenon as the organization's efficiency is into a standardized one; one size fits all models frame. But the absence of unified and reliable way, to answer all organization's efficiency-related questions shall not preclude the search for such answers. Just search for solutions moves the centre of gravity to better understanding of the uniqueness of particular organization that in turn stems from the uniqueness of the people working in it. Michael Porter (Porter, 1980) believes that the country's competitiveness can be analyzed through analysis of each separate organization's competitiveness. Similarly the efficiency of the organization as a whole can be analyzed through performance of the individuals working in it.

Attempts to define performance measurement are not very common in the scientific literature, it reminds the organization's effectiveness situation, but A. Neely (Neely, 1995) provides the following performance measurement, performance measure and performance measurement system definitions:

- Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of action.
- A performance measure can be defined as a metric used to quantify the efficiency and/or effectiveness of an action.
- A performance measurement system can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions.

As we can see, the term "efficiency" is used as an integral part of the "performance measure/measurement" definition, the uncertainty of the concept "efficiency" has already been addressed, so performance measure/measurement itself inherits all problems encountered while trying to define efficiency.

Performance measurement systems

Performance measurement as one of the most important human resources management functions, and is an important prerequisite for overall organizational efficiency measurement.

R. S. Kaplan and D. P. Norton (Kaplan and Norton, 1992) proposed so called Balanced Scorecard system, where performance is measured from four different perspectives and which have become very popular within a short period of time. In addition to already existing traditional financial perspective, they introduced customer, internal processes, and learning and growth perspectives.

Somewhat later appeared Performance Prism (Kennerly, Neely, 2002), which combined the five indicators of different perspectives:

1. Stakeholders' satisfaction (Who are our main stakeholders, what do they want and need?).
2. Strategies (What strategies do we have to develop in order to meet stakeholders' needs?).
3. Processes (What critical processes are needed and how can they be improved?).
4. Capabilities (What capabilities are necessary to operate this processes?)
5. Stakeholder contribution (What contribution are we expecting from stakeholders to maintain and develop these capabilities?).

U. S. Bititci and T. Turner (Bititci, Turner, 2000) in order to ensure the performance measurement system compatibility with the evolving strategic objectives of the organization, focused on the dynamics of the performance measurement systems. For this purpose, they proposed to complement a performance measurement system with an external monitoring module, which can trace and reflect changes in the external environment, as well as internal monitoring module, which can trace the internal aspects of the organization change and signal when the value of the performance indicator goes beyond the limits. To be feasible, such systems should be computer-aided.

G.K. Kanji proposed Business Excellence Measurement System (Kanji, 2002) that consists of two parts (part A and part B) and is based on the Kanji's Business Excellence Model and Kanji's Business Scorecard. Part A deals with internal performance measurement and is viewed from managers and subordinate's perspective. The main aspect of this part of the system is the leadership, which, according to Kanji, is the main business performance excellence driver and promotes customer satisfaction, evidence-based, people-oriented management and continuous improvement of the organizational culture. Part B is devoted to processes excellence, organizational learning and stakeholder satisfaction. Organizational values are the main aspect of this part of the system, and it is aimed to assess organizational performance from the standpoint of the external stakeholders such as financial institutions, government agencies, suppliers, society etc. Indicators of both parts of the system are very closely connected to the of organization's critical success factors.

All mentioned above performance measurement systems share a common thing – they try to look into the performance from the different standpoints – past, present and future, and all of them, in one or another form, contain financial, stakeholder, internal processes and learning and growth perspectives. Despite the fact that different perspectives in performance measurement systems are inter-related by cause – effect relationship, it is easy to notice that each of them is measured in different dimension: financial – in monetary terms or various indicators reflecting value or price, stakeholder satisfaction – quantified by stakeholders

opinion, quality of internal processes – by deviation from the desirable parameters, otherwise called, process quality measure or Sigma (Pyzdek, 2003).

In order to maintain the validity of indicators a subordinate by cause-effect relationship perspective, it is necessary to take into account the contents of the indicators in the cause perspective. If we, trying to improve the financial perspective results, do not stratify customers and treat them all equally, without grouping the most profitable customers into separate segment, the increase in overall customer satisfaction not only can not bring the expected improvement in financial indicators, but on the contrary, it can cause some decrease. This may be due to the fact that a larger number of less profitable customer satisfaction increase can not counterbalance smaller number of more profitable customer satisfaction decrease, while overall satisfaction of our customers is increasing. A similar situation can appear in case of the internal processes – for improving the process parameters, which does not seem particularly important to customers, especially for significant ones, not necessarily triggers a significant customer's satisfaction. And if the improvement of internal processes at the same time will be associated with higher costs, the financial perspective indicators may even suffer.

The learning and growth perspective is quite different from other perspectives, because it is focused on the future rather the past or the present, therefore in this case measurement in this perspective should be based on quite different principles.

Competence-based learning and growth perspective in performance measurement

The right choice of indicators of learning and growth perspective, from which all other perspectives stem, leads to an adequate measurement in all the system. Employee's competences seem to be one of the most suitable candidates to this role.

Lyle M. Spencer and Signe M. Spencer define competence as "an underlying characteristic of an individual that causally related to criterion-referenced effective and/or superior performance in a job or situation" (Spencer, Spencer, 1993). Lucia and Lepsinger give a similar description of a competence: "A cluster of related knowledge, skills, and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development". (Lucia, Lepsinger, 1999). R. E. Boyatzis defines a competence as "a capability or ability". It is a set of related but different sets of behaviour organized around an underlying construct, which we call the "intent" (Boyatzis, 2008).

The different competence definitions are provided by different authors, but they all agree on the fact that competence is directly linked to the individual's performance and therefore to organization's efficiency. This connection is not a matter of course, but results from the careful choice, carried out according to a strict algorithm.

Richard Boyatzis, analyzing the results of the evaluation of competences of many managers and leaders, noticed that the excellent results in organizations are achieved by the leaders determined by the same set of competences (Boyatzis, 1982). It was a stimulus for creation of so-called competence dictionaries. These dictionaries are organized into 3 – 6 different groups, or clusters of competences, which include from two to five different competences. For example, R. Boyatzis presents three clusters of competences differentiating the outstanding one from average performers: cognitive competences (systems thinking or patterns recognition), emotional intelligence competences (self-awareness, self-management) and social intelligence (empathy, teamwork, relationship management) (Boyatzis, 2008). Each of the competences is briefly described, and in addition, it includes three to six behavioural indicators, which describe the different behaviour patterns, in which the competence is being demonstrated.

Employee competence models are much more stable than specific job descriptions or organizational goals detailed to specific person level fragments. On the other hand, it is much easier to develop competence models for specific job than cascade in proper way total goals of the organization to each single employee. Competence models are much more convenient instrument for measuring the efficiency of the individual, and could be much better used in modern organizations than purely mechanical transfer of the organization's objectives to the individual level. Employee competences are future oriented (leading) indicators and observation of its dynamics would help to respond in advance to the organizations performance indicators of other perspectives, which are usually lagging behind.

For these reasons, Peter Drucker's proposed management by objectives approach faced serious difficulties on individual's level, differently from whole organization level. There are several preconditions for successful competence-based human resources management – first of all, creation of adequate to specific job competence models, and secondly – as precise as possible employee competence assessment mechanism.

S.M. Spencer and L.M. Spencer (Spencer, 1993) determined 360 common behavioural indicators, and an even greater number of specific behavioural indicators, which were generalized in the dictionary, made up of 20 different competences. The dictionary consisted of about 85% competences, occurring in a variety

of different competence models. Their own competence dictionaries where created by some large business companies such as Philip Morris, McBer, Aon Consulting, and have been widely used in various areas of human resources management. Competence dictionaries for their own use created and public sector organizations – Tuning dictionary (Loghoff et al., 2010) used in the field of EU's education and science, Saskatchewan public sector competence dictionary – in Canada province (Saskatchewan government), NASA personnel competence dictionary – in the USA , the public sector middle range managers competence dictionary – in the Republic of South Africa.

Richard S. Mansfield analyses two, the most common competence model building methods (Mansfield, 1996): a model customized to the specific position (single-job competence model) and the universal ("one-size-fits-all") competence model. Creation of single-job competence model presumes use of the focus group method, where the group of the best performers gathers all needed information about this particular activity. Summarizing resulting knowledge with the results of the customers' interview analysis, a competence model, which, as a rule, consists of 10–20 competences reflecting individual characteristics, is created. This method is widely used because it allows constructing a sufficiently precise competence model to perform a required job, in addition, it includes the performers into the model building process thus encouraging their dedication and letting them to feel responsible for the results to be achieved. However, this approach consumes a considerable amount of time and efforts. On average, the competence model creation process takes several months.

The development of "one-size-fits-all" competence model is much faster because it can simultaneously be applied to a larger number of employees. In this case, the needed information is obtained from existing specific job models, analysis of the scientific and practical literature in this field, rather than collecting information from the best performers. In order to create a model consistent with the organization's mission and values, ultimately it is submitted to senior level executives for review. The main disadvantage of this competence model building method is that it does not reflect particular and specific requirements for a concrete position.

So as to avoid the shortcomings that are characteristic to each of the above mentioned methods, R. Mansfield proposed a middle way – a method that allows using advantages of both methods. Most researchers agree that in any case the created competence model must be closely linked to the organization's strategy (Naquin, Holton, 2006; Markus et al., 2005; Mansfield, 1996). Starting competence model development from the detailed and thorough analysis of the job description would help to implement it in practice.

A pilot project of applying the draft competence model in performance management was carried out together with the Office of the Prime Minister of Lithuania (Sudnickas, Ališauskienė, 2011).

Properly prepared job competence model and employee competences, adequately evaluated using this model, are cause-effect related to the effective work. So, the employee competences could serve as a very informative leading indicators that can be organically incorporated into the overall organizational performance measurement system, and reflect the individual's level of performance.

Conclusions

- Such a multi-faceted and multipartite phenomenon, which is the organization's performance measurement is very difficult to be stuffed into the standardized, one size fits all frame due to its complexity, the internal contradictions arising from the need to reflect the organization's past, present, and future aspects, use of entirely different dimension indicators connected by cause and effect links.
- The learning and growth perspective of organizations performance measurement system is quite different from other perspectives, because it is not focused on the past or the present, but on the future, and therefore its evaluation and measurement should be based on quite different principles. All other perspectives are derived from it, so the right choice of indicators reflecting learning and growth perspective shall result in an adequate monitoring of all other perspectives.
- One of the most suitable candidates in linking measurement on the individual performance level with organizational one as well as performance future aspect with the present and the past could be the employee competence. Employee competence models are much more stable than specific job descriptions or organizational goals, detailed to specific person level fragments, and flexible enough to reflect personal characteristics, currently not required, but needed in the future.

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Резюме

Применение моделей компетенций в системах измерения деятельности

В статье обсуждается тема эффективности организаций наряду с использованием моделей компетенций в системах измерения деятельности. Оценка эффективности деятельности является многогранным и многосторонним явлением. Она должна отражать как организационный так и индивидуальный уровень производительности с разных точек зрения, отражающих прошлое, настоящее и будущее. Все эти аспекты и перспективы находятся в причинно-следственных связях и измеряются в различных димменсиях. Использование моделей компетенций для отображения перспективы обучения и роста в сбалансированой системе показателей может связать индивидуальный уровен производительности с организационными, а также будущий аспект производительность с настоящим и прошлым.

Ключевые слова: компетенции, модель компетенции, эффективность, измерение производительности (результатов).

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