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The measurement of an organisation's performance in the conditions requiring the elimination of functional organisational barriers

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Abstract

An organisation's performance is determined by means of measures which, through their internal connections, constitute a system. Unfortunately, the measurement of achievements, including processes which create value streams, is frequently conducted fragmentarily, and not comprehensively.

The objective of this article is to analyse the following: (1) changes made in Poland's health care system in the recent years in the context of the manner in which medical processes are organised in health care institutions, (2) the necessity of eliminating functional organisational barriers, and (3) the need to develop a multi-dimensional organisational performance measurement system. Additionally, the coverage of operating costs requires the knowledge of the value of health care services, which results from relevant cost calculations.

The article is based on the analysis of the domestic and international literature on the subject. It has been determined that the current methods of performance measurement used in health care institutions are insufficient, thus requiring reformulation and supplementation. Similarly, it is necessary to reduce barriers between medical departments in view of changes in stakeholders' expectations, especially recipients of services in the areas of personalised or multidisciplinary medicine. This task is not easy, but it is feasible. There are great possibilities of applying solutions typical of business organisations in the area of cost calculation, although the specific character of health care institutions requires an individual approach in each particular case.

Paper type: review article

Keywords: organisational performance measurement system, process orientation, health care institutions, hospitals, health care

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Introduction

Performance measurement systems used in organisations have substantial influence on the management of efficiency and its continuous improvement (Rummler & Brache, 2000, p. 36). Performance measurement of processes is conducted by means of a set of measures which reflect results generated by a process in terms of key success factors (Skrzypek & Hofman, 2010, p. 139). Such process appraisal measures are quantities allowing one to ascertain whether a given process is executed effectively (Bitkowska, 2009, p. 67).

However, performance measurement creates many problems for organisations because it depends largely on organisations' objectives and these are always manifold, frequently competitive with one another and reflecting expectations of various stakeholders. Furthermore, objectives can be formulated according to different concepts. For example, objectives formulated as a function of a subject (e.g. as provision of health care services to patients), as a derivative of objectives of people (groups) creating a given organisation (the basis for such objectives is motives and values, and thus an organisation's mission, its values) or as a resultant of objectives of various stakeholders (e.g. a founding body, payers, patients, employees, managers) or finally as survival and development (Hass-Symotiuk, 2011, p. 66). Unfortunately, the measurement of process results in organisations is frequently performed in a fragmentary, instead of a comprehensive manner; additionally, there is a lack of a methodical approach to the issues related to the planning, measuring, and reporting of process results (Skrzypek & Hofman, 2010, p. 94). Thus the problems of process efficiency measurement constitute a key issue in the area of organisational management.

Inside hospitals, which are the subject matter of this paper, various processes take place with respect to both the creation of value for the customer and the level of their complexity. All such processes require continuous improvement (Bitter, van Veen-Berkx, van Amelsvoort, & Gooszen, 2015, p. 343). Irrespective of this, each of them should be reviewed regularly.

The objective of this article is to analyse the following: (1) changes made in Poland's health care system in the recent years in the context of the manner in which medical processes are organised in health care institutions, (2) the necessity of eliminating functional organisational barriers, and (3) the need to develop a multi-dimensional organisational performance measurement system.

The article is based on the analysis of the domestic and international literature on the subject.

1. Changes in Poland's health care system and their impact on the organisation of medical processes in health care institutions

The health care system in Poland underwent a substantial change in 1999. That period is a time of transition from the so called Siemaszko model to the insurance model of health care (Nojszewska, 2011, p. 175). It was economic and demographic changes that made the reforms of the health care system necessary. This, in turn, caused changes in the manner of financing the health care sector as one of the elements of Poland's economic system.

The trends visible in Poland comprise, first of all, the ageing of society, i.e. the continuously growing percentage of older people in society, lengthening life expectancy, and the low fertility rate. These phenomena have been observed and are well known in developed countries. The ageing of the population influences the amount of expenditures on the treatment of patients and on the manner in which the very treatment process is organised. The other changes taking place in the environment which have a huge impact on changes in the shape of the health care system include technological changes (related to new diagnosis and treatment possibilities), social changes (different expectations of more conscious and better informed patients), or economic changes. These factors cause the necessity of the growing operating efficiency of health care institutions and making better decisions by managers at all levels (Raulinajtys-Grzybek, 2013, p. 129).

The objective of the 1999 reform was to create a financing system which would function outside public funds, which previously had been provided in the form of subsidies directly from the state budget (Drozdowska, Sikorski, & Zemke-Górecka, 2011, p. 19). It was an attempt to free the state from generated debt. Two changes became necessary in such a situation: separating the financing of the health care system from the state budget and implementing the concept of the independence of health care institutions. Consequently, there appeared Sickness Insurance Funds (monopolists in a given territory – province) which, after a few years, were replaced by a centralised system of financing from the National Health Fund, which was established and became the sole payer in 2003. In this manner, the monopolist position of the payer was maintained. Taking advantage of their monopolist position, the Sickness Insurance Funds determined rates for medical services at the level of current costs, while depreciation costs were to be covered by the founding bodies, i.e. the most frequently local government entities which, however, did not receive public revenues to finance their independent public health care institutions (Drozdowska, et al., 2011, p. 21). In consequence, the indebtedness of these institutions continued to grow. The establishment of the National Health Fund maintained the payer's monopolist position and its advantage over the service provider resulting in the imposition of contractual conditions. In this respect, the balance between

the parties is to be restored by the Agency (previously called the Medical Technologies Appraisal Agency, and now the Medical Technologies Appraisal and Tariff Setting Agency), in accordance with the amendment to the Public Health Care Services Provision Act, effective as of 1st January 2015 (The Public Health Care Services Provision Act, 2004). Among other things, the Agency is responsible for establishing tariffs of services and developing proposals of recommendations for a cost accounting standard (The Public Health Care Services Provision Act, 2004, Article 31n, items 1a and 1b). The objective is to determine objectively the value of carried out processes (medical procedures), so that the established amount is sufficient to cover the factual costs incurred for their performance. Before 1st January 2015 it was the National Health Fund that had appraised the costs of health care services, as well as contracted for and supervised their provision, maintaining complete advantage over the service provider. Currently it is the responsibility of the Agency. The Agency's additional preparation of a cost accounting standard aims at standardising the manner of identifying, collecting, processing, presenting, and interpreting information on the costs of health care services. The undertaken activities result, among other things, from the belief that it is bad management of those running health care institutions that is the source of their indebtedness problem. This problem was to be solved by changes in the ownership form of health care institutions, i.e. commercialisation and privatisation (Nojszewska, 2011, p. 176). In this way, it became possible to transform health care institutions into commercial law companies. Nowadays it is possible to observe the trend towards withdrawal from such proposals.

The specific character of the health care services market depends primarily on a financing system and a service provision structure occurring in particular countries. In Poland, the fundamental relationships influencing the functioning of health care institutions include the following:

- regulations imposed by governmental authorities (at the central and local levels),
- agreements entered into with the public payer (the National Health Fund),
- relationships with the medical personnel (physicians, nurses),
- relationships with patients,
- relationships with representatives of the pharmaceutical sector,
- relationships with representatives of the medical technology industries (Raulinajtys-Grzybek, 2013, p. 16).

In the literature on the subject, authors frequently emphasise that networks of relationships with stakeholders with whom managers have to deal are very important in managing public organisations (Frączkiewicz-Wronka, 2009, p. 106). Although apparently simple, this task is in fact difficult in execution. Patients' expectations of health care services providers are also growing systematically. Developing

healthy and correct relationships with patients is not easy, especially in the situation of intensifying pressure from patients for the manner and quality of providing health care services, and sometimes their unjustified expectations regarding the effects of services and the consequent increase in the number of registered complaints (Raulinajtys-Grzybek, 2013, pp. 17–19).

As a result, health care institutions operating within the framework of the health care system frequently continue to be organised according to the principles characteristic for functional organisational structures, although stakeholders' expectations in this respect changed a long time ago; what they require now is the horizontal (process-based, level) organisation of health care processes. Researchers also raise the issue of the insufficient or just very low efficiency of providing patients with health care services, and in particular the problem of the very weak or non-existent connection between a health care institution's investment activities and its core medical activities, which consequently is very close to the issue of poor utilisation of resources (Krasowska-Marczyk, 2007, pp. 169–179).

Changes occurring in the Polish health care system exert direct impact on the manner in which health care institutions organise medical processes, mainly within the framework of the functional areas of organisations; these, in turn, are inadequate for the needs reported by stakeholders which require that managers orient their efficiency towards processes and not functions. Meanwhile, in the literature there appear more and more references to the paradigm of a so called patient-centred model of care (Liberati, Gorli, & Scaratti, 2015, p. 848).

2. On the necessity of eliminating functional organisational barriers

In an organisation there occur many different processes which can be combined in uniform groups, depending on an adopted criterion. One of the classifications most frequently used in both theory and practice is the classification in which three types of processes have been distinguished with regard to value created for the client (Grajewski, 2007, pp. 62–63). According to Hammer (1999, p. 21), a set of processes of key importance for an organisation is usually small, comprising from 5 to 15 processes. Each organisation needs to identify its typical processes, taking into consideration the unique character of its operations.

Health care activities consist in the provision of health care services, the promotion of healthy living, and the performance of didactic and research tasks in relation to the provision of health care services and the promotion of healthy living. Health care services are activities aiming at the maintenance, rescue, restoration or improvement of health as well as other medical activities resulting from treatment processes or separate regulations determining the principles of performing such

processes (The Health Care Activities Act, 2011, Article 3.1 and Article 2.1, item 10). The legal basis for the functioning of institutions conducting health care activities is the Health Care Activities Act of 15th April 2011, as amended; previously it was the Health Care Institutions Act of 30th August 1991 (Chluska, 2014, p. 17). According to the Act, it is possible to distinguish the following types of health care activities:

- in-patient and round-the-clock health care services,
- outpatient health care services (The Health Care Activities Act, 2011, Article 8).

The health care system is managed on the following three levels: the macro level (the Ministry of Health), the mezo level (e.g. founding bodies) and the micro level (individual health care institutions) (Hass-Symotiuk, 2011, p. 7).

In Polish hospitals, the functional structure occurs the most frequently. Work in such a structure is organised in separate units established on the basis of performed functions: food provision, accounting, medical (bed) wards, a laboratory, diagnostic units, an operating theatre, technical maintenance, etc. (Lewandowski, 2010, p. 161). A hospital treatment process is an example of a basic process which starts with patient registration and hospital bed allocation. At further stages this process comprises diagnostics and drug application; it ends with hospital discharge.

Typical examples of the main processes performed by health care institutions include the following: (laboratory, imaging) diagnostics, outpatient treatment, hospital conservative treatment, hospital surgical treatment, rehabilitation, nursing (*Hospital Portraits*, 2013, p. 16). The establishment of mega processes running horizontally across wards, clinics and other organisational units requires a change of the functional organisational structure into a matrix structure which allows one to coordinate the work of teams consisting of various medical specialists coming from many wards (Lewandowski, 2010, p. 166).

In many hospitals, the process-based approach used in particular specialities or wards is a standard (Lewandowski, 2010, p. 165). On the other hand, Polish hospitals practically do not design processes necessary in the treatment of patients requiring multidisciplinary interventions or passing through many specialist wards. The lack of such processes is the reason for the fragmentary character of treatment, which may have a negative impact on clinical results and hinders cost optimisation of the whole treatment process. Having the right to convene multidisciplinary specialist consultations, the service owner, or the coordinator of such a mega process, could cause the development of a comprehensive treatment plan, the optimisation of diagnostics and pharmacotherapy (Lewandowski, 2010).

3. Performance measurement in health care institutions

The management of health care institutions entails the necessity of taking relevant measurements and evaluating achievements of such organisations. The performance of a health care institution is the result of its activities in terms of a degree of the achievement of established goals (effectiveness) and the competence of turning resources into services (efficiency) (Hass-Symotiuk, 2011, pp. 63–64). The performance of health care institutions should be appraised with respect to their possibilities of providing health care services to all patients irrespective of physical, cultural, social, demographic or economic barriers as well as with respect to the whole health care system (Hass-Symotiuk, 2011, p. 65). The objective of a performance measurement and evaluation system is to measure progress in pursuing established goals, to clarify, agree and ensure the implementation of a strategy as well as to plan activities and resources necessary for its implementation (Hass-Symotiuk, 2011, p. 76). The source of necessary information is financial and managerial accounting.

In managerial accounting, performance is identified with financial results. However, besides financial measures, health care institutions may appraise their achievements by means of a whole range of extra-financial measures which are not limited to just one perspective reflecting a given organisation's manner of functioning. Irrespective of a large number of perspectives taken into consideration in performance measurement and evaluation in health care institutions as well as the strengths and weaknesses of each of them, financial measures always constitute a basis which no well-functioning entity can afford to ignore.

The most frequently formulated economic (financial) goal is at least to cover operating costs with achieved revenues. But the achievement of this goal requires the knowledge of the costs of health care services provided by a given health care institution. In this respect, it is cost calculation that should constitute a foundation for further actions.

4. Cost calculation of a health care service

In health care entities, accounting is the basic source of economic information. It collects all necessary data characterising performed activities and fulfils the service function for various management levels, providing them with necessary information. It is an important element of the information system in a health care institution. Furthermore, accounting in health care institutions should be characterised by particular diligence in reflecting management processes because they concern the limited resources of public funds available to the health care system (Chluska, 2014, pp. 20–22).

The reasonable management of health care entities requires relevant knowledge of costs (Świdarska, 2011, p. 9). Direct and indirect (departmental) costs are posted in the direct and auxiliary activities cost accounts. On the basis of source documentation, direct costs can be allocated to particular types of activities; these are, for example, salaries, social insurance premiums and other benefits, used materials and energy, medicines, reagents, disposable and non-disposable medical equipment, purchase of medical procedures (outsourced services) (Hass-Symotiuk, 2012, p. 339). Indirect (departmental) costs are relatively fixed costs of every organisational unit within a health care institution's organisational structure concerning the performance of a given type of activity which cannot be regarded as direct costs. Overhead costs comprise expenditures related to the management of a health care institution as a whole (Hass-Symotiuk, 2012, p. 339).

The implementation of cost recording based on the place of their occurrence allows one to calculate unit costs of provided medical services. For this purpose, one calculates the so called gross production cost of health care services on the basis of direct costs, variable indirect costs and this part of fixed indirect costs which corresponds to the level of such costs at the normal utilisation of production capacities (Nowak & Nita, 2010, p. 95). An example of the calculation of a total production cost and a unit production cost is presented in Table 1.

Table 1 *The calculation of a total production cost and a unit production cost of a health care service – an example*

| Specification | Amount (PLN) |
|--|----------------|
| I. Direct costs | 231,000 |
| 1. Direct materials (used medicines, auxiliary supplies, disposable equipment, etc.) | 147,000 |
| 2. Direct salaries with surcharges (salaries of the medical personnel, social insurance contributions, etc.) | 84,000 |
| 3. Other direct costs | |
| II. Indirect costs | 37,500 |
| 1. Variable costs | 31,500 |
| a) indirect materials | 14,700 |
| b) indirect salaries | 16,800 |
| 2. Fixed costs | 6,000 |
| a) depreciation | 5,000 |
| b) other fixed departmental costs | 1,000 |
| Total gross production cost of health care services | 268,500 |
| Production output (pcs.) – number of provided health care services | 1,050 |
| Unit gross production cost of a health care service | 256 |

According to the cost accounting standard for health care services prepared by the Medical Technologies Appraisal and Tariff Setting Agency, there are as many as eight categories of simple costs. Also additional analytical levels have been introduced with respect to core activities, auxiliary activities and management. Pursuant to § 3.3 of the published regulation concerning recommendations related to the cost accounting standard, a set of cost accounts used by service providers in the functional arrangement contains a division into the costs centres of core activities, auxiliary activities and management (The Regulation of the Minister of Health on recommendations concerning the cost calculation standard applicable to service providers, 2015). The regulation presents also detailed principles applicable to the accounting of particular costs.

Conclusions

An organisation's performance measurement system should be a reflection of processes taking place within it. Changes occurring in health care institutions in such areas as effective legal regulations, changing technologies, expectations of various stakeholder groups (owners, service recipients, payers, employees, local communities, etc.) result in modifications in the organisation of treatment processes in health care institutions. Unfortunately, when an institution adapts itself to new conditions, it is impossible to satisfy all interested parties.

Recently we have witnessed particular discrepancies between the way in which health care entities are organised around functional areas, such discrepancies being determined by the manner of financing executed according to specialities, and the expectations of service recipients related to the approach to the provision of health care services in the comprehensive manner oriented towards the customer, in the horizontal (process-based) arrangement. This can be confirmed, among other things, by the more and more frequent demand for the introduction of so called personalised medicine (close cooperation between diagnostics and therapy) or multidisciplinary medicine (coordination of treatment within the scope of many specialities). Eliminating barriers among specialities is not easy, especially in view of the fact that all activities aimed at the reduction of barriers between medical departments are perceived as attempts to undermine the authority of their managers and to introduce chaos to the organisation (Lewandowski, 2010, p. 163).

The basis for the construction of an organisation's performance measurement system relevant to managerial needs is cost accounting. Hence the need to calculate production costs of a health care service, which – because of the unique character of the medical sector – has recently become the focus of attention for both researchers and practitioners of management. The first effect of such work is the developed cost accounting standard.

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Methodology for assessing and improving the quality of services based on a process approach. Assessment and improvement of the process of customer service in a restaurant

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Abstract

The aim of this article is to present the methodology for assessing and improving the quality of service in a process approach, using the method of the process description and assessment typical of service organizations: Service Blueprinting and Walk Through Audit and demonstrating its practical application on the example of the service process of a real service organization – the customer service process in one of Wrocław's restaurants.

The procedure and the advantages, and limitations of the methodology were demonstrated. Compared with other methods of assessing the quality of services, its advantages are related to the examination of the entire service process and quality assessment of each of its stages. The main disadvantages result from the limitations and drawbacks of surveys used in this methodology.

Practical application of the methodology of assessing the quality of service was shown on the example of the assessment process of customer service in the restaurant (located in the centre of Wrocław). A literature review of methods of assessing the quality of services and data collected among customers and employees of the analysed organizations was used.

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It was found that it helps to identify the stages in the process of customer service in which the expectations of customers are not met and to determine the extent of improvement actions.

Paper type: conceptual article/case study

Keywords: quality, service, method of assessing quality of services, assessment of services, process, process improvement

Introduction

Quality of service is a key factor determining the position of the organization in the modern world. Increased competition in many areas of the service results in the fact that only organizations with the highest level of quality can remain on the market and grow their business. The quality of service should be understood as meeting the needs and expectations of customers. In order to achieve the expected level of quality, organizations must know their customers and their requirements, plan the service process, and continuously monitor and evaluate the implementation of this process. So far many methods have been developed for assessing the quality of services. The ones most commonly used in business practice focus on the evaluation of the result of the process (e.g. SERVQUAL, SERVPERF, CSI). Few methods try to assess the quality of all stages of the service from the point of view of the process in which the customer is directly involved. Those few include Mystery Shopping (Douglas, 2015), Walk Through Audit (WTA) (Fitzsimmons & Fitzsimmons, 2008), Critical Incident Technique (CIT) (Gremler, 2004) and its varieties, such as, Sequential Incident Technique (SIT) (Stauss & Weinlich, 1997).

The aim of this article is to present the methodology for assessing the quality of service in a process approach, using the method of the process description and assessment typical of service organizations: Service Blueprinting and Walk Through Audit. It was decided to show its practical application in the evaluation of the service process of a service organization – the customer service process of one of Wrocław's restaurant.

1. The proposed methodology of evaluation and improvement of quality of service

The proposed methodology for assessing the quality of services has been developed based on the general methodology of assessment of services used in many organizations and the existing methods of description and assessment of the service process. There are six steps that are characterized in Table 1.

Table 1 *Characteristics of individual stages of the proposed methodology for assessing the quality of services*

| Stage | Characteristics of stage |
|--|--|
| Description of service process | Determining activities and resources in the process of customer service and resources involved in the process (technical aspect of the service) according to the Service Blueprinting method. |
| Establishing criteria for assessing the quality of each stage of the process | <p>The assessment criteria established for each stage of the process, in which the customer is directly involved based on the information included in the Service Blueprinting diagram.</p> <p>One should take into account the elements belonging to the service package:</p> <ul style="list-style-type: none"> - materiality of service, - materials used as part of service, - information (reliability, timeliness, availability, accuracy), - explicit part of the service associated with the obtained results of the actions taken in the process, - implicit part of the service associated with subjective feelings (i.e. behavioural characteristics). |
| Preparation of the questionnaire for surveys | The questionnaire includes questions for each stage of the service process (assessment of the service package on the five-point Likert scale). |
| Preparation and conduction of survey | Surveys among customers and employees who directly serve them. Measurement in the direct form, by phone or e-mail. |
| Description and analysis of test results and formulating conclusions | <p>Data obtained from customers and staff serving them are analysed and compared.</p> <p>Critical quality attributes are analysed in terms of causes and effects, and conclusions relating to the improvement of the service process are formulated.</p> |
| Development of a new project of a service process. | <p>Conclusions from the analysis are the basis for formulating suggestions for the implementation of changes (improvements) in the process.</p> <p>In the case of changes in the structure, a newly designed service process can be represented using the Service Blueprinting diagram.</p> |

The presented methodology uses two methods: Service Blueprinting and Walk Through Audit. Service Blueprinting is a graphical method used for service process visualization (Shostack, 1984). The method involves the presentation of all the activities in the service process taking into account the division into actions visible and invisible to the customer (but affecting the quality of the activities visible to the customer).

Another method used in the presented methodology – Walk Through Audit – aims at the assessment of customer satisfaction with the implementation of individual stages of the service in which the customer participates directly. Its objective is to carry out a systematic evaluation of the customer experience regarding the whole process from beginning to end by measuring the customer perception regarding the efficiency of each stage of delivering the service (Lai-Ping Leong Koljonen & Reid, 2000, p. 35). The method is based on the assumption that the system

of measuring the quality of services should allow for evaluating customer expectations, and ideas about customer service are shaped during its performance (service process). Therefore, a meticulous audit of the service process from the customer's perspective is necessary.

The method procedure includes five steps (Lai-Ping Leong Koljonen & Reid, 2000; Fitzsimmons & Fitzsimmons, 2008; Dobrowolska & Skowrońska-Szmer, 2012):

- describing the process from the point of view of the customer (visible actions),
- preparation of the survey questionnaire,
- conducting surveys,
- analysis,
- a summary of the survey results.

2. Advantages and limitations of the proposed assessment and improvement methodology of the quality of services

The proposed methodology for examining the quality of service is different in many ways from other traditional methods of assessing the quality of services (e.g. CSI, Servqual). The differences are presented in Table 2.

The basic advantages of the proposed methodology are associated with the use of the description tool highlighting customer service activities in which they are directly involved. Quality assessment applies to the entire service process, and measurement refers to the perception of the effectiveness of each stage of the process. The assessment of quality characteristics associated with both the service (explicit and implicit part of the service) and goods supplied within the service (technical customer service). The requirement to conduct the study also among the personnel directly involved in the service can provide additional information allowing for a more complete assessment of the differences in the perception of this service.

Restrictions on the use of the method are associated with the fact that it cannot be used to assess services, such as, self-service which is carried out without the participation of employees of the service provider. Furthermore, achieving unreliable results may be related to poor preparation of the questionnaire survey or poor selection of the test sample.

Table 2 *Key differences between traditional methods of customer satisfaction examination and the proposed methodology*

| Methodology Criterion | Traditional methods of examining customer satisfaction | The proposed research methodology |
|-----------------------------------|--|--|
| The essential purpose of research | Determination of overall customer satisfaction with the quality of service | Evaluating customer experience with the whole service process from beginning to end |
| Main attitude | Measuring customer attitudes and opinions on the service and perception of quality of service (quality characteristics) | Measuring the perception of the effectiveness of each stage of the service process |
| Procedure | The structure of the questionnaire allows for measuring the perception of customers | The procedure requires the description of the process from the point of view of the customer. The structure of the questionnaire involves the measurement by customers, staff and benchmark customers |
| Survey questionnaire | The questionnaire can be completed by the customer at any time after the service has been performed | The questionnaire can be completed by the customer during or immediately after the service process |
| Survey scope | Quality characteristics associated with the service itself (availability, timeliness, reliability, convenience, professionalism) | Evaluation of quality characteristics associated with both the service (explicit and implicit part of the service), and goods supplied within the service |
| Survey conduction | Often conducted by the marketing staff long after the service has been performed | Typically, by the personnel performing the process immediately after the service has been provided |

Source: based on Lai-Ping Leong Koljonen & Reid, 2000, p. 35.

3. An example of the application of the proposed methodology for assessing service quality in a restaurant

Introduction

The presented methodology for assessing the quality of the service was used to evaluate the customer service process in a restaurant located in the centre of Wrocław, serving vegan meals for individual customers. Surveys (among customers) and interviews with restaurant staff, in accordance with the adopted methodology, was conducted in the spring of 2015.

Process description

In the restaurant examined the customer service process has never been defined before. There was no official description of this process, or a customer service manual for staff. The interview with employees had to be conducted in order to determine the structure of this process. On its basis it was established that the customer service process begins with the arrival of the customer to the restaurant and ends when the customer leaves the restaurant. According to the adopted methodology the whole process was presented with the use of the Service Blueprinting (Figure 1) diagram which states that the customer is involved in eight operations which can be divided into three stages:

- arrival of the customer to the restaurant – including three steps: arrival of the customer/greeting, getting familiar with the menu, placing an order,
- consumption – including: the choice of the table, waiting for the order, consumption of meals and/or beverages,
- leaving the restaurant – including: paying the bill and saying goodbye to the customer by the bartender and the customer leaving the restaurant.

Establishing evaluation criteria

In order to develop a survey form, the authors established quality criteria for each stage of the process and the general performance of the service which were the basis of survey questions. Quality criteria were formulated based on the analysis of diagram Service Blueprinting regarding the activities and the technical aspect of the service and based on an interview with the employee directly supporting customers (bartender) regarding his observation of the most common complaints formulated by customers.

To increase the likelihood of a high survey return rate, the smallest possible number of questions for each stage was prepared. The accepted criteria for assessing the quality of customer service in the restaurant examined are shown in Table 3.

Preparation of the questionnaire

The questionnaire for survey research among restaurant customers consisted of two main parts: questions evaluating the quality of customer service and personal details.

The first part consisted of questions formulated for each quality evaluation criterion and five additional questions regarding the overall assessment of the service:

- overall quality of customer service,
- general ambience of the restaurant,
- overall degree of cleanliness of the restaurant,
- general attitude and behaviour of staff,
- overall flexibility towards the customer and taking into account individual needs.

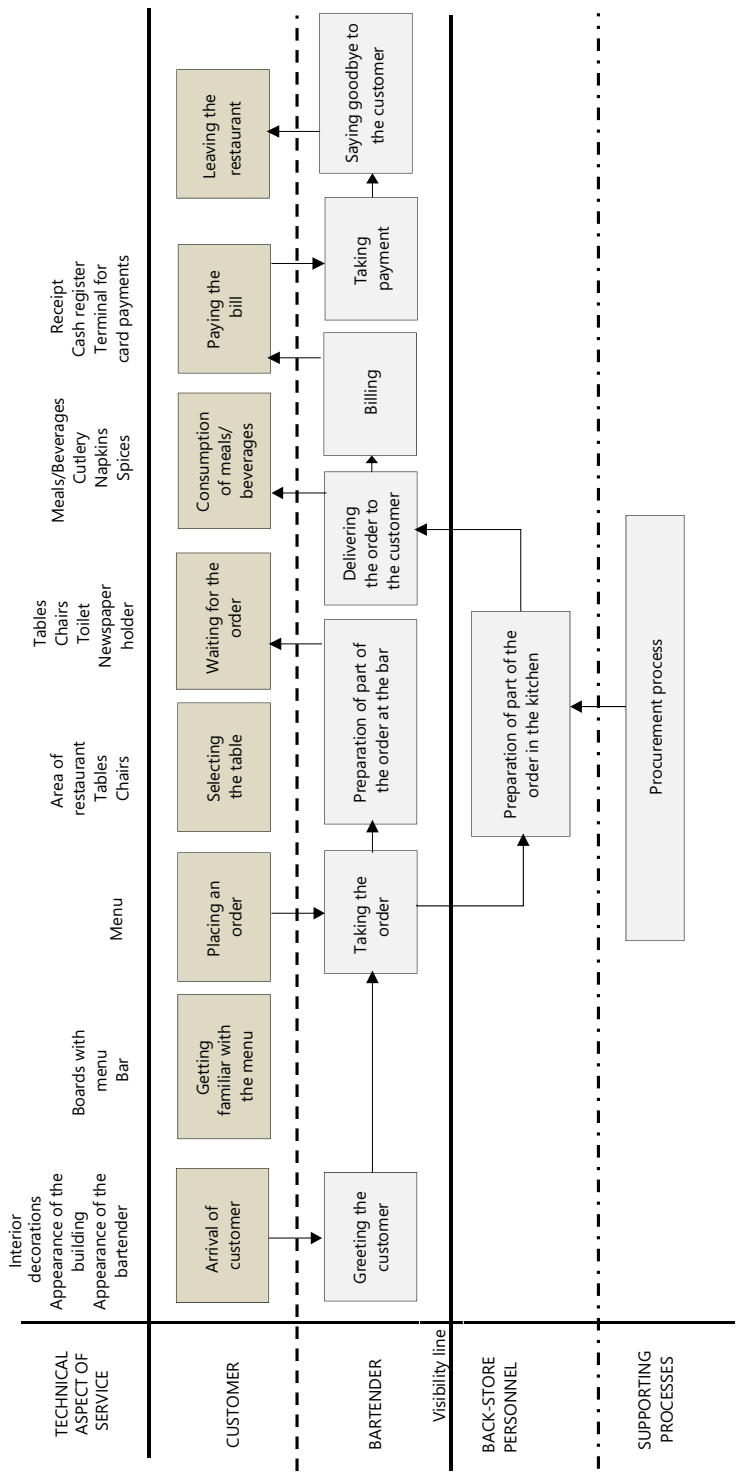


Figure 1. Service Blueprinting for the process of customer service in the organization examined.

Source: Ossowska, 2015, p. 74.

Table 3 *Criteria for assessing the quality of customer service in the restaurant examined*

| Process stage | Actions taken by the customer | Technical aspect of the service | The criterion for assessing quality |
|---|---|---|---|
| The arrival of the customer at the restaurant | The arrival of the customer/greeting | Appearance of the building Interior decorations Appearance of the bartender | 1. Availability of the restaurant (location, opening hours) 2. Politeness in greeting the customer 3. Appearance of the restaurant 4. Neatness of dress and appearance of bartender |
| | Getting familiar with the menu | Boards with the menu Bar | 5. Availability and readability of the menu 6. Number and diversity of the offer in the menu |
| | Placing an order | Menu | 7. Kindness of bartender 8. The bartender's familiarity with the menu 9. Speed of taking the order |
| Consumption | Table selection | Area of restaurant Tables Chairs | 10. Availability of tables 11. Convenience of tables and chairs |
| | Waiting for the order | Tables Chairs Toilet Newspaper holder | 12. Speed of order delivery 13. Equipment and cleanliness of toilets |
| | Consumption of meals/beverages | Meals/Beverages Cutlery Napkins Spices | 14. Aesthetics of meals/beverages 15. Freshness of meals/beverages 16. Taste of meals/beverages 17. Temperature of meals/ beverages 18. Availability of additives, such as, spices, napkins during the meal |
| | Paying the bill | Receipt Cash register Terminal for card payments | 19. Speed and accuracy of bill settlement |
| Leaving the restaurant | The bartender says goodbye to the customer who then leaves the restaurant | | 20. Politeness of saying goodbye to the customer |

Source: based on Ossowska, 2015, pp. 74–75.

Fragments of the questionnaire containing questions about the arrival of the customer to the restaurant and the overall assessment of the quality of services in the surveyed restaurant were presented in Figures 2 and 3.

| | | | | | |
|---|-------------------------------|---|---|------------------------|--------------------|
| How do you assess the availability of the restaurant (location, opening hours)? | High availability | | | | Low availability |
| | 5 | 4 | 3 | 2 | 1 |
| Did the bartender greet you politely? | He didn't not greet me at all | | | | |
| | Very politely | | | | Or very impolitely |
| | 5 | 4 | 3 | 2 | 1 |
| How do you assess the appearance of the restaurant? | I like it very much | | | I don't like it at all | |
| | 5 | 4 | 3 | 2 | 1 |
| How do you assess the neatness of dress and appearance of the bartender? | Very positively | | | Very negatively | |
| | 5 | 4 | 3 | 2 | 1 |

Figure 2. Fragment of a survey questionnaire including questions about the stage of the arrival of the customer to the restaurant.

| | | | | | |
|---|---------------|---|---|---|---------------|
| Assess the overall quality of customer service | Very good | | | | Very bad |
| | 5 | 4 | 3 | 2 | 1 |
| Assess the general ambience of the restaurant | Very good | | | | Very bad |
| | 5 | 4 | 3 | 2 | 1 |
| Assess the overall cleanliness of the restaurant | Very clean | | | | Dirty |
| | 5 | 4 | 3 | 2 | 1 |
| Assess your general feelings about the attitude and behaviour of staff | Very positive | | | | Very negative |
| | 5 | 4 | 3 | 2 | 1 |
| Assess the general consideration of individual customer requests by staff | Very high | | | | Very low |
| | 5 | 4 | 3 | 2 | 1 |
| What is the probability that you will visit the restaurant in the future? | Very high | | | | None |
| | 5 | 4 | 3 | 2 | 1 |
| Do you have any additional comments regarding the quality of service in the restaurant? | | | | | |
| | | | | | |

Figure 3. Fragment of the survey questionnaire includes additional questions regarding the overall assessment of the quality of customer service in the examined restaurant.

For the needs of the study, the authors prepared a brief survey of personal details consisting of six questions relating to sex, age, frequency of visits, education, economic activity and the average monthly net income per household member.

Implementation of research and processing of data

The pilot studies were conducted over three consecutive days (spring 2015) on a sample of fifty randomly selected restaurant customers and two employees who served customers during the study period.

Processing of the data was based on the summary of:

- averaged results for each day,
- averaged results from the examined sample of respondents and employees,
- determining the overall indicator of customer satisfaction with the various stages of the process,
- calculating the standard deviation between the answers given by customers and restaurant staff.

It summarizes the results of the research groups of respondents according to the criteria taken from personal details. The collected answers to open questions regarding the quality of service in the restaurant were grouped according to the similarity into four main categories: appearance and cleanliness of the restaurant, toilets, order delivery and other opinions.

Results

For the analysis of the results of surveys, classic and new techniques to improve quality were used: The Pareto-Lorenz analysis, Diagram of dependences, the Ishikawa Diagram and Diagram of similarities (KJ). The FMEA methodology was also used in the analysis of the causes and effects of mistakes in the process of customer service. What proved to be useful in the interpretation of the results was the information obtained from open questions most of which explained the negative assessment of one criterion.

The analysis of the results allowed for formulating a general conclusion regarding the quality of services: that a low assessment of quality attributes by customers is the result of: problems with the technical aspect of the service (e.g. low assessment of the appearance of the restaurant), mistakes in the process of customer service caused by employees – inappropriate process management (e.g. too cold soups), mistakes in business and employee management (e.g. lack of work standardization). These three main problems have determined three directions of improvement of the organization.

Draft of changes

Conclusions from the analysis were used to formulate 43 improvement activities related mainly to the improvement of the technical aspect of the service (the appearance and cleanliness of the restaurant, changing the menu card) and employee management systems (e.g. introduction of standardization of work and positions, setting individual goals for employees, introduction of incentive and control systems for employees). Their analysis showed that most of them are easy and fast to implement.

Conclusions

The article presents the methodology for evaluating the quality of services using known but relatively rarely used techniques: Service Blueprinting and WTA. Its advantage which distinguishes it from other methods of assessing the quality of service is the fact that it allows not only the overall assessment of the quality of services, but also customer satisfaction with each stage of the service process, and can be the basis for a decision to change the structure of the process, or resources used in each step of the process (e.g. human, material).

Basic disadvantages of the methodology result from the applied research tool, that is, the questionnaire. Mistakes made in the course of its construction, for example, disregarding the inherent quality characteristic can affect the final result of research.

Its practical application presented in the article to evaluate and improve the quality of customer service in Wrocław restaurant confirmed its advantages and disadvantages.

It should be emphasized that the proposed methodology can be applied only to traditional services, implemented without the use of technology (e.g. computers).

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Relationships between organisational culture and human resource management

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Abstract

The objective of this article is to present connections between organisational culture and human resource management (HRM), taking into account differences resulting from the existence of numerous typologies of such cultures. The article focuses on a wide range of organisational culture's impact on diversified organisational variables remaining under the influence of adopted HRM solutions. Within the area of strategic HRM, the article deals with relationships between a type of organisational culture and a type of a personnel strategy effective in a given organisation. Examples of types of cultures supporting particular HRM strategies are provided. On the other hand, within the area of operational HRM, the authors pay attention to relationships between a type of organisational culture and practices adopted by an organisation within the scope of particular personnel functions. They show that the perspectives of both the strategic and operational approaches to human resource management can constitute a basis for analysing their connections with organisational culture. The article includes examples of the discussed relationships with respect to the motivational function carried out in organisations. The adopted objective has been achieved by means of an analysis and critical review of the literature on the subject as well as a logical analysis and structure.

Paper type: review article

Keywords: organisational culture, typologies of organisational cultures, human resource management, personnel policy, personnel strategies

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Introduction

The results of various researches show the influence of organisational culture on numerous variables, including individual commitment and personal efficiency (Gupta, 2011, p. 223), job satisfaction, task execution, innovativeness, new product development or organisational effectiveness (Szczepańska & Kosiorek, 2015, p. 44). In combination with human resource management practices, organisational culture influences employees' attitudes and behaviours, which translates into an organisation's operating results (Katou, 2012, p. 147). This allows one to make a few observations. Firstly, results achieved by employees are connected with their motivation. Its superior level characteristic for homogeneous and strong organisational cultures (Szczepańska & Kosiorek, 2015, p. 44) allows the achievement of better results. Secondly, organisational effectiveness is connected, among other things, with labour costs, which are influenced by both an organisation's remuneration system and its employees' level of competence. Thirdly, organisational culture is a source and foundation for work methods and behaviours, and thus it constitutes a factor supporting the managing personnel in the pursuit of an organisation's goals. The manner in which an organisation uses its human capital depends partly on its organisational culture. On the other hand, human resource management practices can exert impact on organisational culture. Thus it becomes the subject of considerations within the context of its connections with human resource management.

The objective of this paper is to indicate the key relationships between organisational culture and human resource management. The fulfilment of this objective has been based on an analysis and critical review of the literature on the subject as well as a logical analysis and structure.

1. A definition of organisational culture

In scientific research, organisational culture is perceived deterministically, remaining in relationships with such variables as a mission, a strategy, an organisation's structure and size, the management's activities, or functions within an organisation. What results from this is a diversity of definitions of organisational culture. The conducted analysis of various definitions allows one to ascertain that their common feature is the identification of such attitudes and reactions of participants that differentiate organisations from one another. The elements of organisational culture that are the most frequently mentioned in its definitions include assumptions, values, standards, convictions, rules and principles shared by an organisation's employees. Assumptions concern the organisation's environment, reality and the perception of truth, human nature, the nature of human action, and interpersonal relations. Values are "objects, states of affairs and situations which employ-

ees cherish and try to achieve through their participation in the organisation (...). Values give rise to standards which determine what should be pursued and what should be avoided, and how this should be done. They show what should be regarded as important, what is (...) a priority. Standards shape attitudes which, in turn, cause employee's particular behaviours" (Gadomska-Lila, 2011, p. 56). Convictions are judgements or opinions based on one's belief in the truth or rightness of occurring phenomena or states of affairs (*Słownik języka polskiego/The Polish Language Dictionary*, n.d. a). For the members of an organisation, they are guidelines allowing them to choose and assess what they should do in order to achieve intended results. Rules, in turn, are specific instructions on how to behave or act, established or adopted on the basis of a procedure, a custom or a habit (*Merriam-Webster*, n.d. a). Principles are laws governing particular processes or phenomena, or a manner of conduct in given circumstances established under some regulation (*Słownik języka polskiego/The Polish Language Dictionary*, n.d. b). They can be also understood as moral rules or an outlook on life helping employees to get to know what is right and what is wrong, thus exerting influence on their actions (*Merriam-Webster*, n.d. b). In the practice of management, organisational culture is understood as a set of the superior values of the managing personnel, such as the clarity of strategy/shared goals, systematic decision-making, integration/communication, innovation/risk-taking, accountability, action orientation, fairness of rewards, and development & promotion from within (Santos, Hayward, & Ramos, 2012, p. 26).

Summing up, it can be said that the basis for determining connections between organisational culture and human resource management is the adoption of its definition according to which it constitutes a model of values and learnt methods of dealing with experiences which have developed during the history of a given organisation and which tend to manifest themselves in people's behaviours (Sun, 2009, p. 137).

2. The notion of human resource management

There are many approaches to the personnel function identified with personnel management in terms of people management. It is described within the context of managing an organisation's social potential, labour resources, human potential, or human resources. It is the consequence of the evolution of views on the personnel function, where "more and more frequently emphasis is placed on the strategic significance of all employees" (Listwan, 2010, p. 15), as well as "the functioning of the science of organisation and management on the borders of many disciplines" (Antczak, 2009, p. 24) and thus the perspectives for its presentation (sociology, psychology, management). Human resource management "comprises the whole range (the spheres of both theory and practice) of activities related to people, aimed at the

achievement of an organisation's goals and the fulfilment of its members' needs" (Antczak, 2009, p. 23). In this context, "the objective of the personnel function (...) is to ensure a proper number of employees with proper qualifications at proper positions (...). The key tasks of the personnel function are as follows: the selection of employees and the monitoring and modification of their behaviours through the appraisal of the current level of their competences and motivation as well as the shaping of their competences through training and development activities, and their motivation through a reward system" (Pilch, 2006, pp. 627–628).

Strategic human resource management

Strategic human resource management comprises "a coherent configuration of activities including the determination of long-term objectives, the formulation of principles, plans, and programmes oriented towards the creation and utilisation of an organisation's human capital" (Pocztowski, 2003, p. 60). The performance of the personnel function is connected with a personnel strategy being:

- "a unique model according to which personnel-related decisions are made (...),
- a long-term concept concerning labour resources, aimed at their proper shaping and commitment (...),
- long-term objectives and manners of their achievements in the area of personnel management" (Listwan, 2010, p. 63).

The development of a personnel strategy should be based on a number of assumptions among which the most significant ones are as follows (Rostkowski, 2005, p. 22): treating employees as an important element of an organisation's assets, emphasising the impact of the environment on the practices related to employee recruitment, focusing on long-term and pro-active activities anticipating future threats, taking into account the contribution of all employees towards the performance of an organisation's tasks, and stressing the importance of development and continuous change. The formulation of a personnel strategy depends on the previous provision of answers to the fundamental questions concerning the goals of the personnel function which comprise the issues related to the following (Listwan, 2010, p. 67): the current characterisation of employee resources, their condition at a particular moment in the future, the shaping of the personnel in terms of its size, features and qualification structures as well as adopted solutions and activities which need to be undertaken in order to achieve employees' commitment, i.e. readiness to carry out tasks entrusted to them. What results from this is the demand that a personnel strategy be formulated "on the basis of a continual analysis of an organisation and its general objectives, inclusive of changes occurring within them" (Rostkowski, 2005, p. 32). The justification for this demand is also the result of the close connection between an organisation's personnel strategy and its general strategy; the former should not so much result from the latter, but they should be

co-developed simultaneously (Rostkowski, 2005, p. 25). Thanks to the identification of mutual relationships between the personnel strategy and the general strategy already at the stage of preparation, it becomes possible to acquire a proper level of their integration at the stage of implementation. It implies practically the mutual permeation of both types of strategy, which reduces the treatment of the personnel strategy as only a derivative of the general strategy (reactive relationships) because it is employees that constitute an organisation's key resource determining the directions of its activities (pro-active relationships) (*Leksykon zarządzania/The Lexicon of Management*, 2004, pp. 536–537). The literature on this subject presents various classifications of personnel strategies. We can distinguish among them offensive strategies characteristic for businesses which grow dynamically, employ creative and innovative people who are ready to take risks, as well as defensive strategies in which “recruitment and promotion are based on employees within an organisation” (Listwan, 2010, p. 62), as loyalty and job seniority are more important than efficiency. The further examples of classifications take into account the following types of strategies (Listwan, 2010, pp. 62–63): quantitative strategies (focusing on the manning of positions and the adjustment of personnel needs to the labour market), qualitative strategies (oriented towards motivational activities); strategies oriented towards an entry (based on activities aiming at the acquisition of the required number of employees with required qualifications), towards a transfer (focusing on individual improvement and development) or towards an exit (concerning the manner of terminating employment relationships and reducing the number of employees). A personnel strategy should be oriented towards ensuring the provision of human resources meeting an organisation's expectations with respect to both competence characterisations and effective cultural standards and values shared by an organisation's members, such standards and values being required of both current and future employees. On the one hand, this demand is connected with the perception of the personnel's potential as the source of competitive advantages; on the other hand, with the claim that “values are one of the main sources of criteria for the appraisal of employees' usefulness for work in a concrete organisation” and because of this they have “enormous influence on not only the shape of a personnel strategy, but also the method of its implementation and the shape of developed tools” (Rostkowski, 2005, p. 31). Therefore, personnel strategies should be oriented towards the improvement of the quality of an organisation's existing personnel, which is frequently treated as an element of an enterprise's assets and its basic capital (Rostkowski, 2005, p. 22). This can be achieved through training, inspiration, and creating conditions for self-development, an effective motivational system, including employees in decision making processes, allowing them to present their own opinions, or effective communication within an organisation (Vanhala & Ahteela, 2011, p. 872). It should be added that the quality of the personnel strategy is the “degree of achievement of the objectives pursued by the personnel function” (Szczepańska, 2014, p. 115). A personnel policy constitutes a concrete embodiment

of a personnel strategy and is understood as “a systematised set of assumptions (...), a group of goals, principles and measures resulting from a personnel strategy which are to be used in its execution thanks to relevant instructions with respect to operational people management in an organisation” (Król, 2006, p. 71). This makes it possible for the managing personnel to shape relationships and influence employees’ behaviours with a view to achieving the organisation’s goals. Classification of the personnel policy models includes: “the development of human capital, the acquisition of human capital, creating alliances and contracting human capital” (Szczepeńska, 2014, p. 116). The implementation of a personnel policy is based on principles which can be distinguished at the general and detailed levels. At the general level, they comprise (Król, 2006, p. 75) non-partisan, objectivity, law and order, comprehensiveness, rationality, planning, humanism, the uniformity of conduct, the transparency of criteria and modes of conduct, the clarity and matter-of-factness of criteria, the permanence of basic assumptions, the continuity of improvement. On the other hand, the principles established at the detailed level concern “the particular elements of human resource management or even particular tools” (Król, 2006, p. 77). The examples of detailed principles related to an employee selection policy include providing candidates and employees with equal opportunities, or recruiting candidates for managerial positions from outside the current employees. With respect to a motivational policy, the examples of detailed principles include rewarding employees according to their achievements or minimising the fixed part of a salary. Personnel policy principles are connected with the principles resulting from the definition of organisational culture. The fact that they are generally accepted and, consequently, complied with determines a set of rewarded behaviours and also defines a set of behaviours that are undesirable or punishable. The principles of human resource management and the accompanying practices result in part from the Universal Declaration of Human Rights, the Charter of Fundamental Rights of the European Union, the international legislation (the International Labour Organisation, the European Union Parliament) or the national law (e.g. the Labour Code). They are also included in formalised codes of ethics effective in organisations. The principles included in the aforementioned sources and taken into consideration in the provisions of a personnel policy require integration at the level of organisational culture.

Operational human resource management

Besides the strategic approach, human resource management can be analysed also at the operational level. Its scope is presented differently by different authors, but it is generally accepted that it comprises the following elements: the planning of demand for employees, employee resourcing, i.e. selection and recruitment, the hiring process together with introduction to job positions, appraisal and occupational development, remuneration, motivation, and termination. The planning of demand

for personnel consists in determining the number and characterisation of employees in terms of their qualifications as well as the moment at which the organisation will need them to be able to pursue its strategic goals. Hence the knowledge of the organisation's future personnel needs together with changes to the current level of employment as well as work efficiency and labour costs is of key importance. The resourcing of employees is based on the processes of recruitment and selection. Through its (informative, motivational, and pre-selective) functions, recruitment aims to acquire the sufficient number of candidates for the purposes of the selection process. Recruitment can be carried out in various forms, e.g. internal recruitment (searching for employees within an organisation) or external recruitment (searching for candidates outside an organisation), narrow recruitment (addressed to a particular group of candidates) or broad recruitment (aimed at the acquisition of a large number of candidates), open recruitment (available for every candidate meeting the qualification criteria) or closed recruitment (limiting the availability of an offer to a selected group of specialists) (*Leksykon zarządzania/The Lexicon of Management*, 2004, p. 488). Selection, in turn, is an assessment of candidates' usability and their adjustment to a particular position. It comprises the following activities: an analysis of application documents, an interview and a preliminary diagnosis of a candidate's qualifications, a proper interview, the acceptance of a candidate, the submission of an employment offer, and hiring (McKenna & Beech, 1999, p. 7). Hiring is the process of meeting all formal, including legal, conditions for employment. Such conditions include relevant medical examinations, the execution of a written employment agreement, and the candidate's provision of documents required by the organisation. The introduction of the new employee to their position concludes the hiring process. It consists in providing the employee with information necessary for their smooth adaptation to the new situation as well as the effective and efficient performance of work. Employee appraisal and development constitute an investment in people which is spread over time. Apart from a multi-faceted approach to the employee's results, another objective of the appraisal process is to motivate the employee to improve their performance and to determine perspectives for their development. Employee development consists in identifying the thematic scopes and types of training activities allowing the employee to update and broaden their knowledge as well as to develop their skills in order to improve the operational effectiveness, achieve set objectives, and shape required attitudes and behaviours. Remuneration and motivation are areas concerning issues related to employees' acquiring both wage and non-wage benefits. Remuneration can appear in cash or non-cash forms. Its aim is the broadly understood motivation of employees, which is an organisation's conscious and deliberate exertion of influence on its employees' motives for their actions. Employee motivation in the form of a motivational system is one of the key determinants shaping employees' efficiency. It is a set of tools such as positive or negative stimuli and tangible or intangible motivation factors (Czermiński, Czerska, Nogalski, Rutka, & Apano-

wicz, 2002, p. 351). Termination consists in the adjustment of the level of employment occurring when the quality or quantity of the personnel is incorrect in terms of time, space or cost. The objective of this process is to improve an organisation's operational effectiveness with respect to both its entirety and particular parts. An employment reduction plan comprises all transfers, resignations, fluctuations, horizontal or vertical promotions, and dismissals.

3. The types of organisational cultures and human resource management

Organisational cultures are divided according to numerous criteria, which results in a large number of their typologies. The typologies which are the most frequently presented in the literature on this subject are based on the adoption of a single criterion based on one variable (the result is two alternative types of cultures, e.g. strong or weak, feminine or masculine, elitist or egalitarian) or the adoption of a dichotomous division constituting a basis for a multidimensional model whose result is a whole set of pairs of alternative cultures (e.g. in Gesteland's typology, it is possible to distinguish the following types of cultures: partnership, protransactional, ceremonial, non-ceremonial, monochronic, polichronic, expressive, and self-restraining) (Listwan, 2010, pp. 55–57). The division of the types of organisational cultures based on a bipolar matrix with two variables and resulting in four culture types is very popular in the literature on the subject. A good example is the typology based on the opposite values of the two dimensions: individualism – collectivism and outer-containment – inner-containment. In consequence, it is possible to distinguish four types of organisational cultures oriented towards the following: power (this type is characterised by domination over the environment, competitiveness, uncompromising nature, high power distance, strong rivalry), roles (it is characterised by bureaucracy, privileges closely related to held positions, stability of actions, compliance with regulations), tasks (it is characteristic for organisations which are flexible and react quickly to changes in the environment), and people (it is based on low power distance, consensual decision making, cooperation, mutual support, and experience sharing). Another example of a division of cultures based on the opposite values of the following dimensions: flexibility and freedom of action – stability and control as well as orientation towards internal matters and integration – orientation towards the position in the environment and diversity, is the typology resulting in the distinction of the cultures of the following: market (what is important in it is the achievement of goals and the execution of tasks; the role of the management is to achieve the required results), hierarchy (it is characterised by a high degree in the formalisation of the forms of communication and cooperation, a strong hierarchic character of positions, an undisturbed course of processes in ac-

cordance with procedures), adhocracy (it encourages innovativeness and creativity; freedom and initiative are valued highly), and clan (the basis for its assumptions is common values and goals; it pursues the development of team work and stronger commitment). It has been shown that the result of the numerous taxonomies of organisational cultures is their types. Their particular characteristic features remain in a close relationship with strategic human resource management. For example, quantitative personnel strategies will be supported by a power culture or a market culture. On the other hand, qualitative strategies will favour cultures oriented towards people or clan. A role-oriented culture or a hierarchy culture will support defensive personnel strategies, in contrast to a task culture or an adhocracy culture which will be more suited to offensive strategies. The aforementioned relationships do not exhaust the possibilities of conducting further analyses of the connections between various types of organisational culture and personnel strategies. It is also possible to show organisational culture's connections with operational human resource management. The impact of cultural values will manifest itself in all practices of operational human resource management, including recruitment, selection, hiring, motivation, development, appraisal, and termination activities. For example, in an organisation where a role culture or a hierarchy culture dominates, emphasis will be placed on a routine and repeatable performance of tasks, which will be reflected in the rewarding of this type of behaviours and motivational activities aimed at the elimination of innovative behaviours requiring flexibility. On the other hand, in organisations dominated by a task culture or an adhocracy culture, people will be rewarded for actions based on high tolerance for uncertainty and acceptance of risk, requiring creativity, oriented towards searching for inventive tools, where the motivational system will encourage freedom in undertaken initiatives. Organisations characterised by a power culture or a market culture will encourage their employees to participate in competition and rivalry, in contrast to organisations favouring a people-oriented or a clan-oriented culture. Such organisations will reward behaviours promoting cooperation, knowledge sharing, and collective decision making. It should be stressed that both strategic and operational human resource management not only remain under the influence of organisational culture but also, through followed practices, exert impact on employees' attitudes and behaviours. It means that the management's deliberate shaping of solutions in the area of human resource management constitutes a mechanism supporting the management's efforts aimed at the shaping of required cultural models.

Conclusions

The reasons for the consideration of the relationships between organizational culture and HRM results from the fact, that none of the models HRM (e.g. Harvard, Michigan, Schuller's) does not refer to aspects (elements) of organizational culture. The exception is the Toyota model (model of the human system), which takes into account the value of e.g. respect for the employees. Furthermore the culture of a given organisation can strengthen or weaken the implementation of the adopted personnel strategy. Solutions and practices in the area of operational HRM supporting the implementation of a personnel strategy should, on the one hand, be based on the recognition of organisational culture's impact on employees, in particular on their attitudes and behaviours. It means that HRM instruments need to be adjusted to a particular cultural model (assumptions, standards, values) existing in an organisation. On the other hand, a particular shape of HRM instruments used at the operational level, starting from recruitment and selection through the subsequent personnel functions (appraisal, development, remuneration, motivation) to termination, should imply required changes in organisational culture with a view to its better adjustment to the HRM strategy currently under implementation.

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CSR 2.0 as a new approach to corporate social responsibility

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Abstract

Corporate Social Responsibility (CSR) is an increasingly popular management concept. It is worth noting that changes in the business environment, especially the rapid development of information and communication technologies and the emergence of social media, influence the development of this concept. In recent years, there appeared a new concept of corporate social responsibility – CSR 2.0. – which was suggested by Visser. This idea assumes, among other things, the use of social media in CSR practices. Unfortunately, few Polish companies are present in social media which seem to be an ideal instrument to communicate socially responsible activities.

The article analyses and evaluates CSR 2.0, and also shows basic differences between the classic and new approach to the strategy discussed. In order to prepare the article, the author conducted a critical analysis of Polish and foreign literature, reports and studies prepared by various institutions, the descriptive and comparative method.

Paper type: review article

Keywords: corporate social responsibility, CSR 2.0, Information and Communication Technologies, management, strategy

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Introduction

Modern economy is constantly changing, which is reflected in different areas of business. The rapid development of information and communication technologies (ICT) forces companies to use new solutions, also within Corporate Social Responsibility (CSR). The availability of different ICT tools enables easier communication in real time. Today the Internet allows users to interact and involve in the creation of content portals. A special role is played by social networks, blogs, and special software which allow for changing the content of the website by each Internet user at any time (Wiki). These tools are called social media. Social media are often the only source from which stakeholders derive information about the company and its activity. Furthermore, the use of social media is a chance for instant contact and drawing attention of consumers. It should be noted that the stakeholder profile and methods of communication and collaboration with stakeholders are subject to change. As a consequence, CSR is evolving. An expression of this change is the creation of the concept of CSR 2.0, suggested by Visser (2010a), an important element of which is the active involvement of stakeholders, and the use of social software, i.e. websites for creating and modifying content.

The aim of the article is to show the differences between the classic and the new approach to CSR and the analysis of the concept of CSR 2.0 when it comes to its usefulness for entrepreneurs.

The critical analysis of the literature and reports was conducted in order to pursue the goal of the study.

1. The importance of the Internet for Polish enterprises in the context of the concept of corporate social responsibility

Today, the Internet has become an indispensable part of life for many people. This also applies to businesses, among which a significant part uses ICT when conducting business activity. Surveys conducted by the Central Statistical Office in Poland show that in 2014 computers were used by 94% of companies, including nearly all large entities. What is also increasing is the number of households with a computer with Internet access. In 2014, 74.8% of households had access to the Internet. This percentage was higher by 2.9% than in 2013 (*Spółeczeństwo informacyjne w Polsce w 2014 r.*, 2014, p. 12).

When analysing the importance of the Internet it is worth noting the purposes of using it. One of the main objectives of the use of the Internet by households is to participate in chat rooms, groups or discussion forums, use of instant messaging,

creating and reading blogs and using social networking sites. In the case of people aged 16–74 this aim is declared by 41.1% of users, while in the case of the age group of 12–15 years, as much as 85.2% (*Spółeczeństwo informacyjne w Polsce w 2014 r.*, 2014, p. 16).

There are many social networking sites among the most visited websites in Poland. In 2014, Facebook was used by 19,804,795 people, YouTube by 18,433,337, and nk.pl had 5 million users (Gemius Audience, n.d.).

It seems that no company should ignore such a large number of potential customers. In this case one can talk about a new customer profile, or stakeholder, for whom communication and interaction via the Internet is an integral part of everyday life. A new kind of stakeholder is defined as stakeholder 2.0 (Roszkowska-Śliż, 2012, p. 91) who:

- is part of the network, is connected with others,
- is curious about the world and is better informed,
- trusts friends rather than advertising,
- likes to share, collaborate and take collective action,
- appreciates freedom and is active,
- does not separate work from play, and spends free time on creative activities on the Internet,
- is a prosumer,
- is always online, reacts in real time and expects that from others,
- is able to self-organize and influence the actions of companies.

Internet users present in social media have the option of delivering opinions and, therefore, these media can be a tool for the company's communication with stakeholders. Social networking sites are a great spot for placing social reports by companies. The company present in social media does not bear any costs, because the use of such sites is free. Moreover, these portals give easy access to people who are or may be interested in a particular company. Therefore, companies using the concept of corporate social responsibility must pay particular attention to social media and stakeholders operating in them. They can become a key instrument in the construction of an effective CSR strategy of the XXI century. It is worth noting that a significant number of people chooses to interact with companies and brands on social networks, as early as in 2010, 43% of Internet users added comments on the profiles of companies, 16% commented on materials posted by the company on the website (*Konsument w mediach społecznościowych*, 2010, p. 13).

It is worth asking whether Polish companies recognize potential benefits brought by the Internet, especially social media? The data on the use of social media by households and companies in Poland were used for this purpose (Figure 1).

The data show that social media are tools that are not often used in business, especially by the smallest businesses in Poland. One will notice that the popularity

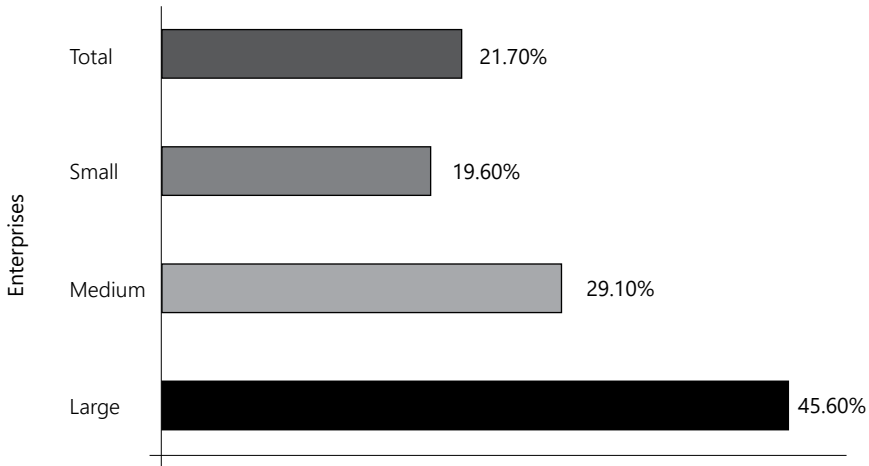


Figure 1. *The use of social media in Polish enterprises.*

Source: based on *Społeczeństwo informacyjne w Polsce w 2014 r.*, 2014, p. 10.

of the use of social media increases with the size of the company. The advantage of large entities over the medium and small ones may be due to the fact that they often have qualified managerial staff, and use the team of advisors and professionals who recognize the importance of social media. In addition, large companies generally use modern management methods and techniques. The use of social media can be extensive and cover marketing issues and cooperation as well as building relations with internal and external stakeholders. Comprehensive identification and monitoring of the objectives of using the Internet by stakeholders, who are, inter alia, households, may help the company build effective CSR tools. Thanks to social media, more stakeholders may become interested in the activities of the company. In addition, the cost of presence in social media is much lower than the cost of using traditional media. Furthermore, drawing the attention of stakeholders to the idea of CSR through social media is possible when it is considered authentic and compatible with the value system of users of a social networking site on which a given campaign is run (Proszowska, 2013, p. 64).

Undoubtedly, technologies are changing the space in which a given enterprise operates. Thanks to them, companies can gain new business contacts as well as the information necessary for effective business operations. This information may relate to, among other things, new markets, customers and suppliers. Enterprises using the Internet can also make immediate payment for transactions. The Internet is a source of knowledge, examples, solutions and tools that can enable companies to adapt and respond to changes in the environment. It can enhance increasing the level of innovation and, thus, competitiveness (Leoński, 2014, p. 188).

2. CSR and changes between Web 1.0 and Web 2.0

Corporate Social Responsibility of the second generation (2.0) is associated with a model of creating internet solutions – Web 2.0. In the initial phase of development (Web 1.0) Internet networks consisted of websites that allowed users to receive specific content. The Internet was a tool used for one-way communication. Users could not modify and create new content within the network. The Internet was only a “virtual newspaper” (Tapscott & Williams, 2008, p. 64). Currently, the Internet gives much greater opportunities for its users. First of all, Internet users can communicate, interact and create content for websites. The most popular sites and Web 2.0 services include (Kaznowski, 2008, pp. 95–114):

- social networking sites (e.g. Facebook, nk.pl, MySpace),
- thematic blogs,
- social media (including citizen journalism services),
- knowledge base (e.g. Wikipedia),
- social sharing (e.g. YouTube, Wrzuta.pl),
- virtual worlds (e.g. Secondlife).

It can be argued that the difference between Web 1.0 and 2.0 is the same as between the passive and active use of the media, between consumption and creativity (creation). In addition, no expensive software and in-depth knowledge is needed for this active creation. All that is needed is free and easy-to-use applications widely available on the Internet (Jung, 2010, p. 7). It is reasonable to present similarities occurring between Web 1.0 and Web 2.0, and the classical approach to corporate social responsibility (CSR 1.0) and the approach proposed by Visser (Table 1).

In summary, it can be noticed that the conditions of the use of the concept of corporate social responsibility are being changed by the growing importance and use of Web 2.0 tools by stakeholders and companies. Web 1.0 was characterized by the constant nature of websites and one-way communication. In Web 2.0 there appeared their dynamism and a wide dialogue between many parties. A similar situation occurs in the case of CSR 1.0 and CSR 2.0, where new technologies resulted in more active contacts with stakeholders. Internet users can obtain information about a company, product, service from various sources and, most importantly, can verify it. In addition, Internet users can engage in the creation of CSR initiatives. These factors make it possible to talk about the second generation of corporate social responsibility.

Table 1 *Similarities between Web 1.0, Web 2.0 and CSR 1.0 and CSR 2.0*

| Web 1.0 | CSR 1.0 |
|--|---|
| The flat world is just beginning to connect and is looking for a medium capable of sending information and adding advertising | It is a way for companies to establish relationships with communities, conduct philanthropic activity and manage their image |
| The emergence of important innovations, such as Netscape, which was quickly crushed by giants like Microsoft and Internet Explorer | It contains many pioneering start-ups, such as Traidcraft, which later became a product for international corporations, such as, Shell |
| Focusing mainly on standardized hardware and software dedicated for PCs, bypassing the multi-level applications | Using the same standards, codes, norms, guidelines |
| Web 2.0 | CSR 2.0 |
| Defined with slogans: “Collective intelligence,” “networking,” “participation of users” | Defined with slogans: “Global communities,” “innovative partnerships,” “stakeholder engagement” |
| Among the tools used there appeared social media, notifications channels and beta testing New tools include stakeholder panels, transparent reporting and a new wave of social entrepreneurship | |
| It is both the development of technology and a new way of perceiving the world | It perceives decentralization of power, as well as changes in the context: from few large ones to many small ones and from exclusivity to sharing |

Source: based on Visser, 2010a, p. 317.

3. Corporate Social Responsibility of the second generation – CSR 2.0

The first issue to note when analysing CSR 2.0 is its name. In the classic notion, CSR stands for Corporate Social Responsibility. CSR 2.0 stands for Corporate Sustainability and Responsibility. The very naming of CSR 2.0 indicates great importance: sustainability and responsibility. The concept of sustainable development talks about a kind of compromise between economic development and the environment and society, so it concerns mainly the area associated with ecology and environmental protection. In contrast, the concept of responsibility is related to pro-social activities.

CSR 2.0 can be defined as a combination of Web 2.0 technology with socially responsible activities. The effectiveness of CSR 2.0 in this case largely depends on the ability of the company to use new technologies, networks and media in order to win the favour of stakeholders. Of course, the actions of the company must be sincere and in line with the values that characterize the users of the website. A new approach to CSR is an exchange of opinions and knowledge, widely understood dialogue and building stakeholder engagement through modern communication tools.

The DNA of CSR 2.0, according to Visser, is two strands that are intertwined with each other and complement each other. One strand is sustainability treated as: objectives, mission, vision, strategy. The second strand is responsibility manifested by: solutions, answers, management, actions. In this case one can say that sustainable development is an objective and responsible way to reach a specific goal (Visser, 2010b). The CSR 2.0 is about creating and implementing sustainable and responsible business model which, supported by a reformed financial system and the economy, will make the creation of a better world easier, more natural and cost-effective (Visser, 2010a, p. 317). Visser distinguishes 5 key features of CSR 2.0, as shown in Figure 2.

| | |
|---|------------------|
| C | – creativity |
| S | – scalability |
| R | – responsiveness |
| 2 | – glocality |
| 0 | – circularity |

Figure 2. *Features of CSR 2.0.*

Source: Visser, 2011, p. 153.

Socially responsible firms should be creative. Social and environmental problems are complex and their solution requires a creative approach and going beyond the existing CSR standards. Unusual and effective solving of tasks and problems in the company and its environment is conducive to the development and growth of employees. Scalability is connected with the scale of current CSR being too small. In the case of CSR 2.0, the scale of socially responsible practices should be much higher and include global problems. One should not focus on PR activities, but on the benefits that can be derived by the environment and society. Another feature of the new concept is responding, including in cases where it is inconvenient for the company and aims to change the business model. Glocality involves the adaptation of global products and services to the requirements of the local market. Circularity, on the other hand, is about designing actions that will be responsible and sustainable from the beginning to the end and will be characterized by the absence of prodigality and concern for stakeholders.

Visser, comparing the organization to the organism, proposed the four bases, which should dominate the organization of CSR 2.0. This concept involves four key DNA codes and the accompanying four strategic objectives (Table 2).

Table 2 *DNA code of CSR 2.0*

| Basis of DNA | Strategic objective | Indicator | Description |
|---------------------------|-----------------------------|---|---|
| Creating value | Economic development | Capital investments Profitable products Social inclusion | Economic, social, human and natural capital Responsible goods and products Distribution of wealth |
| Good management | Institutional effectiveness | Leadership Transparency Ethical practices | Strategic commitment to accountability and sustainable development Social reporting Prevention of corruption and bribes |
| Social contribution | Focus on stakeholders | Philanthropy Fair work practices Integrity of the supply chain | Donations Working conditions, respect for workers' rights, safety Development of the SME sector, maintaining high standards in contacts |
| Environmental integration | Sustainable Ecosystems | Protecting ecosystem Renewable resources Production without waste | Protection of biodiversity and restoration of ecosystems Renewable energy and materials Elimination of waste |

Source: Visser, 2014, p. 3.

The creator of the concept of CSR 2.0 – Visser shows the DNA code of CSR 2.0 which is based on value creation, efficient and effective management, commitment to social action and environmental concerns, it is supposed to enable the achievement of strategic goals which include a balanced ecosystem, economic development, focus on stakeholders and institutional effectiveness.

One of the differences between traditional CSR and CSR 2.0 is the departure from the micro scale, that is, from the perspective of a single company, and looking at the responsibility of companies from the macro perspective (as widely-understood impact on: society, not only the local community, the environment – not only in the immediate neighbourhood, but in the scale of the system formed by nature) (Stefańska, 2013, p. 2007).

Conclusions

Changes in the technical-social environment created new conditions for the formation and implementation of socially responsible activities. These conditions represent both opportunities and threats for many companies. The ability to use ICT and Web 2.0 tools, thanks to which companies can be in active contact with stakeholders and engage them to produce creative solutions, constitutes a real opportunity. However, the threat may be the criticism of business practices contrary to the principles of CSR. This criticism may even lead to boycotts of websites of such companies. The creation of a new profile of a stakeholder, who has a greater impact on the activities of businesses, leads to socially responsible companies being able to more closely involve in the implementation of CSR strategies. Social media in recent years have become an indispensable part of everyday life. Portals such as: Facebook, Youtube, Twitter are visited by millions of Internet users every day. They are the place of interpersonal interaction and a great source of information. Undoubtedly, a great advantage of the discussed media for the company is global reach and ability to reach a wide group of stakeholders. Furthermore, compared to conventional media, social media are much cheaper. They allow for collecting feedback and establishing cooperation with stakeholders and involving them in the CSR activities of the company. Organizations can use socially responsible media on several key levels, i.e. analysis of information, dialogue, creating relationships and cooperation. Unfortunately, studies show that in Poland many companies do not see the benefits of the presence in social media. As a result, only a small part of them uses social media as a communication channel for CSR activities. The popularity of social media continues to grow, and, therefore, it can be assumed that there will be more and more actions that are in line with CSR 2.0 in Poland.

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Costs of quality in the appraisal of an organisation's human resources by means of selected (cost-based, income-based, multiplier, and mixed) methods

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Abstract

This article's subject matter combines the issues of human resource management, quality management, and value management. The issue of appraisal has been limited to the micro (management) level, although it can also relate to the macro (economic) level. It has been assumed that, as a fairly complex process, diagnosing the value of human resources in an organisation entails costs (also quality costs) if its objective is to achieve reliable and correct results. The goal of this article is to identify such costs, taking into consideration the process of selecting a human resource appraisal method, algorithms of applying particular selected methods, and applications of achieved results. The author has relied on both the classical and newer appraisal methods presented in the literature on this subject as well as the classification of quality costs proposed by Bank.

Paper type: conceptual article

Keywords: quality costs, appraisal, human resources, cost-based methods, income-based methods, multiplier methods, mixed methods

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Introduction

The appraisal (valuation) of human resources in an organisation causes many more difficulties than the appraisal of the value of tangible assets (Lipka, Król, Waszczak, & Satoła, 2008, pp. 103–109). Although this type of appraisal has been the subject of considerations in the worldwide literature on the subject since the middle of the 1960s, its reliability is still far from perfect and continues to raise numerous doubts (Gebauer, 2005, p. 216). Therefore, it is reasonable to review the existing appraisal methods within the context of quality, or more precisely – quality costs.

In view of the usefulness of the continuation of the author's previous research (Table 1), this article is based on the classification of quality costs proposed by Bank (1999). This classification comprises the following elements:

- costs of conformance (costs of prevention and appraisal),
- costs of non-conformance (costs of external failures, costs of internal failures, costs of exceeding requirements), and
- costs of lost opportunities (costs of lost benefits).

The objective of this article is to identify quality costs in accordance with this classification, taking into consideration the process of selecting a human resource appraisal method, algorithms of applying particular selected methods, and applications of achieved results. The scope of the analysis comprises the methods being “representatives” of the most frequently presented groups of appraisal methods together with their divisions presented in the literature on the subject (Bechtel, 2006, pp. 38–39, 51–54, 82–83).

The article focuses on the verification of the following hypothesis: In the case of all analysed human resource appraisal methods, it is possible to identify all types of quality costs included in Bank's (1999) proposal.

This classification of quality costs can be also applied to identify such costs within the process of selecting a human resource appraisal method. It seems that, apart from investigations conducted by experts, the only effective method of verifying the hypothesis is inference based on a critical analysis and evaluation of the literature on the subject. And this particular method is used in this article.

Table 1 *The author's own and co-authored publications concerning the application of the concept of quality costs to the area of human resource management*

| Particular research area | Type/method of analysis | Source |
|--|---|---|
| Indexes of quality costs of personnel activities and services Examples of quality costs for selected personnel activities, e.g. derecruitment | Theoretical and methodological analysis | Lipka, 2005b, pp. 25, 45–48 |
| Tendencies in changes of costs related to quality-oriented activities | Theoretical analysis | Lipka, 2007, pp. 13–27 |
| Optimisation of quality costs from the perspective of personnel risk | Theoretical analysis | Lipka, 2009, pp. 339–350 |
| Identification of quality costs of personnel processes and projects supporting knowledge management | Analysis of 17 cases; measures and indexes of quality costs | Lipka, Król, Satoła, & Waszczak, 2009, pp. 49–80, 89–118 |
| Quality costs of autotelic motivating; relations: quality costs – risk of shaping internal motivation | Theoretical analysis supplemented with exemplification | Lipka, 2010b, pp. 34–45, 53–54, 79–107, 121–203 |
| Quality costs of various types of investments in human resources | Exemplification for 22 various types of investments | Lipka, 2010a, pp. 286–297 |
| Quality costs of managing employee loyalty programmes | Theoretical analysis together with exemplification | Lipka, Winnicka-Wejs, & Acedański, 2012, pp. 15–161 |
| Quality costs of preparing and conducting experiments in the area of human resources management | Exemplification of quality costs of experimenting | Lipka, Waszczak, & Winnicka-Wejs, 2015, pp. 83–84 |
| Issue of reducing consequences of (cyber) discredit by quality costs | Theoretical analysis | Lipka, Król, Waszczak, & Winnicka-Wejs, 2016, pp. 123–124 |
| Personnel activities preventing social exclusion and their quality costs | Theoretical analysis | Lipka, 2005a, pp. 207–217 |

1. The quality costs of the process of selecting a human resource appraisal method

The process of selecting a human resource appraisal method is determined by various conditions. It occurs after a decision according to which an organisation will be carrying out such an appraisal because related expenditures are lower than benefits. The documenting of the existence of such conditions by appraisal specialists can be considered as prevention costs. They are connected with the costs of appraising various groups, and within their scope – types of appraisal methods.

The aforementioned conditions include determination whether a particular method can be applied in a given enterprise. The possible barriers include the following:

- the number of employees,
- the diversity of the organisation's human resources,
- the incompatibility of the method with the appraisal basis expected by the company,
- the lack of concurrence between the method and the company's expectations regarding considered temporal perspectives,
- access to data,
- not taking into consideration the internal contextual factors (strategy, structure, culture) of the organisation's functioning,
- the turbulent environment,
- not taking into consideration flexibility and the organisation's implementation of the lean management concept,
- incompatibility with the ideas of work-life balance and downward movement,
- failure to meet the expectations regarding the form of expressing appraisal results,
- impossibility of documenting the relation between human resource management and the value of such resources.

An obvious general barrier (not connected to any particular appraisal method) is the lack of appraisal specialists in a company or the economic inefficiency of employing such specialists or training them internally. A given method can also prove unprofitable because of considerable expenditures necessary for its application. In such cases, it is appraisal specialists who decide whether the basic criterion for the selection of an appraisal method is the quality of results or the effectiveness of the procedure itself (in which quality and other effects of the procedure are determined in relation to incurred expenditures). This choice can be influenced by not only knowledge but also the attitude of the aforementioned specialists to methods based on costs, income or strategic value carriers, as well as variables included in such methods. The selection of a method based on an improper prioritisation of selection criteria generates costs of lost benefits (lost opportunities), while adjustments made to such a selection – depending on their time – generate the costs of internal errors (before an appraisal is made publicly known) or external errors (after an appraisal is made publicly known). Prevention costs, including an analysis of trends in the evolution of appraisal methods, a verification of the degree to which the proposed appraisal method meets relevant requirements (e.g. that of objectivity), can decrease the scope and weaken the consequences of non-conformance costs.

Prevention costs make it also possible to lower costs of lost opportunities consisting in not selecting a particular appraisal method which, in the case of comparable expenditures, would provide data concerning various areas, e.g. both enterprise appraisal and personnel controlling (Lipka, 2014, pp. 81–97).

2. The quality costs of using the replacement method

The replacement method proposed by Flamholtz in 1971 belongs to the group of cost-based human resource appraisal methods together with, among others, the historical cost method developed by Brummet, Flamholtz, and Pyle. For the purposes of this analysis, the former method has been selected as it contains more cost elements than the latter (Flamholtz, 1985, p. 11). It is an individual employee that constitutes a methodological foundation for value determination in the replacement method. This method disregards the internal contextual conditions of an organisation's functioning, i.e. its strategy, structure, and organisational culture.

The application of the replacement method gives results expressed in monetary terms. Depending on whether it is conducted during the appraisal process or during the application of its results, the verification of such results entails non-conformance costs: internal ones or external ones. Non-conformances may concern any of the three appraisal elements, i.e. acquisition costs, training costs and/or redundancy costs. Within acquisition costs, they may be related to indirect costs (of promotion or employment within an organisation) and/or direct costs (of a job description and/or recruitment and/or candidate selection and/or employment). The identical cost structures with respect to acquisition costs in both the replacement method and the historical cost method result in the occurrence of the same quality costs in the case of the latter method. As far as training costs are concerned, the adjustment of non-conformances within quality costs may refer also to indirect costs (in this case, in the form of an instructor's working time) or to direct costs, i.e. formal on-the-job education and/or training. Non-conformance costs comprise also redundancy costs (which do not occur in the case of the historical cost method). Direct costs are related to adjustments to the level of remuneration immediately before an employee's departure, while in the case of indirect costs, such adjustments concern a degree to which work efficiency falls before an employee's departure and/or the costs of a vacancy before a new employee is hired. The level of such costs depends, among other things, on the current situation in the labour market. If the replacement method is followed, the aforementioned non-conformance costs may be high in view of the fact that "the market is a basis for determining the replacement value of resources in a business enterprise. However, this measure may be regarded as subjective because managers may assign various values which they consider as replacement costs to the particular elements of the model" (Dobija, 2003,

p. 134). In order to reduce the scope of errors in the appraisal of such cost elements, prevention costs and appraisal costs may be incurred within the scope of conformance costs. Appraisal costs concern also the determination of expenditures on employee recruitment, introduction, and development. If these costs are too high because of excessively detailed analyses or appraisals, costs of exceeding requirements occur. Costs of exceeding requirements indicate that expenditures on the personnel processes are not in a profitable relation to their effects in the form of a higher quality or value of a new employee replacing the one who has left the company. In particular cases, it is possible that no replacement costs will appear because of advanced technologies or the absence of employees with required skills and qualifications in the market (Dobija, 2003). Then the application of the human resource replacement cost model entails costs of lost opportunities. Such quality costs occur also because of variables in the analysed method, which takes into account economic variables only. Another condition for the generation of such costs is the fact that, "In the replacement method (...), the value of human capital (human resources of high quality and value) is determined as at the date of the 'replacement necessity,' which entails the impact of the current (present) situation in the labour market on the value of human capital" (Bochniarz & Gugąła, 2005, p. 26). Thus costs of lost opportunities are the consequence of not taking into consideration either historical data or prospective data. The replacement method takes account of inter-individual differences and also the issues of flexibility and the implementation of work-life balance and downward movement, as well as lean management. Therefore, costs of lost opportunities incurred in this context are not related to this method.

3. The quality costs of using the discounted cash flow method

Developed by Flamholz in 1975, the discounted cash (revenue) flow method has returned to considerable popularity recently. It belongs to the group of income-based appraisal methods. It allows one to appraise an employee following a particular career path (Bochniarz & Gugąła, 2005, p. 26). Thus it takes into consideration an organisation's structural context (organisational structure).

Conformance costs (prevention costs and appraisal costs) concern the very determination of a career path. As implied by the method, they can also refer to the possibility of managing allocation as well as motivation risk (motivating employees to move to higher positions) and derecruitment risk, and thus to the possibility of shaping the quality of these processes. On the other hand, (internal or external) non-conformance costs related to the use of this method may be connected to errors in determining added value generated at particular positions by an employee who holds them during the course of her career. Such errors, in turn, result from misjudgements in determining revenues and/or costs. Furthermore, errors of this

type can be made while determining the probabilities of a given employee's transfer to higher positions or leaving the organisation. They can also occur in calculating the expected and discounted values for particular years, thus distorting the acquired result. If the principal of annual capitalisation is not adopted in calculations, what appears is costs of exceeding requirements – another element of non-conformance costs. The growth of the enterprise or the occurrence of unstable revenues causes the necessity of giving up the method, which entails costs of lost opportunities. In connection with such costs, the method uses economic variables and takes into account prospective (not historical) data only in order to calculate the current value of incurred expenditures. With respect to costs of lost opportunities, inter-individual differences are disregarded as well because, in the analysed method, it is the types of job positions that constitute its methodological basis of reference. But the method takes into consideration flexibility and lean management, as well as work-life balance and downward movement, hence there occur no costs of lost opportunities related to these factors.

4. Quality costs in the A. Mayo Monitor

Developed in 2001, the A. Mayo Monitor is a multiplier method because the value of human capital (of an individual, team or a whole organisation) determined on the basis of this method is the product of the value of a multiplier and a variable functioning as a basis for comparisons. The level of appraisal costs (within the meaning of conformance costs) and – in the event of errors – the costs of internal or external errors determine the reliability of the appraisal of the four aspects included in the Monitor (Mayo, 2001), i.e. a talent profile, a potential profile, a contribution to the creation of value, and conformance with values important to an organisation (the last aspect proves that the cultural context is taken into account in value determination).

Errors may concern, for example, an incorrect assignment of a score (0.5, 1.0, 1.5 or 2.0) caused by a wrong interpretation of an employee's hierarchy of values as compared to the values embedded in organisational culture. Such errors are facilitated by the lack of objectivity in the appraisal of the aspects, the complex character of the method, or the scope and detail of information (Pocztowski, 2004, p. 180). On the other hand, the appraisal method based on a point scale does not entail costs of exceeding requirements. Also, there occur no costs of lost opportunities because:

- a mix of economic, psychological, and organisational variables is not taken into consideration,
- there are no references to prospective data,
- the diversity of human capital in the organisation is not taken into account.

But this type of costs does occur when:

- the impact of human resource management practices on the value of human capital is not determined,
- flexibility, lean management, work-life balance and downward movement are not taken into consideration.

5. The quality costs related to the application of the Saarbrücken formula

The Saarbrücken formula was invented by Scholz, Stein, and Bechtel (2006, p. 10) in 2005. It should be remembered that the authors did not provide all details of its application algorithm, most probably for commercial reasons. It is one of the mixed appraisal methods. Its methodological basis of reference comprises employment categories (groups). Conformance costs or non-conformance costs influencing appraisal reliability are connected with the appraisal of all elements included in the formula, i.e.:

- basic value (the number of employees in terms of full-time positions),
- loss of value (obsolescence of knowledge),
- compensation of value (intensity of training activities),
- changes in value (changes in market salaries, motivation, employee retention) diverging from the established procedure of their determination (e.g. with respect to determining employees' motivation) and relational dependencies occurring among them.

Failure to use this method means giving up the opportunity not only to base an appraisal on historical and prospective data as well as strategic value carriers and various, not only economic variables, but also to use such an appraisal to determine the following:

- progress in the implementation of a personnel strategy (e.g. an offensive strategy or a development and stimulation strategy) and its communication within the organisation,
- contribution of particular personnel activities to the value of human resources,
- the effectiveness of human resource management practices (including the use of flexibility, lean management as well as work-life balance and downward movement), which is related to costs of lost opportunities.

Costs of this type will not occur in connection with taking into account the most frequently analysed features of the diversity of human resources (the features of the primary identity and secondary identity).

Conclusions

This article presents two older (from the 1970s) and two newer (from after the year 2000) methods of appraising human capital in/of an organisation which represent the following groups of methods:

- cost-based methods,
- income-based methods,
- multiplier methods,
- mixed methods.

Providing examples for each elementary type of quality costs as defined by Bank (1999), the author has demonstrated that they can be applied with respect to each of the aforementioned methods of this classification. It has been shown further that this classification can be used in the appraisal method selection process. The discussed problems should be assigned to the qualitology of human resources because quality costs are its inseparable part. It seems that, in the conditions of demographic deficits, the concept of quality costs in the field of human resource management will be gaining in importance in view of the necessity of compensating such deficits with improved quality of such management. Additionally, quality costs can be related to each personnel process/activity, i.e. not only to human resource appraisal (constituting a part of research on such resources assigned to the strategic management level [Scholz, 1989]).

In further research on the issues presented in this article, one could apply Bank's concept of quality costs or other structural presentations of such costs to the other methods of appraising human resources in organisations. Another possibility is an attempt to determine the level of such costs.

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The quality of an organization management as a complex adaptive systems

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Abstract

Organizations belong to the class of complex adaptive systems (CAS). The article presents system models (structural and functional) of an organization and connections with the environment, as well as identifies and characterizes its fundamental attributes of the system and the critical conditions for survival and development of natural, economic and social aspects. On such basis the author defined management and quality management of an organization and gave his interpretations in terms of key system attributes and critical conditions for survival and development. Due to non-variant key attributes and critical conditions considerations are significant for organizations of all types and sizes.

Paper type: conceptual article

Keywords: complex adaptive system, organization, metamodels, management, quality of management

Introduction

In terms of a system, organizations belong to the class of complex adaptive systems (CAS). As such, they have some of the key attributes of a system, and to continue and grow must meet critical conditions regarding the state, dynamics and richness of information resources and non-informative, in natural, economic and social aspects.

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The article presents the systemic patterns of organization (structural and functional), its connections with the environment, identifies and characterizes the fundamental attributes of a system and the critical conditions for survival and development. On such foundations management and quality management of an organization were defined and interpreted in terms of key system attributes and critical conditions for survival and development.

Due to non-variant ability of key attributes and critical conditions contained in the article considerations are relevant to organizations of all types and sizes.

The article focuses on the usefulness of epistemological research, which combines well with the constructivist approach (with the appropriate use of induction and deduction).

1. The organization as a complex adaptive system

The organization is a hosting entity. A hosting entity is a separate object in the social and economic and natural environment, which is a collection of resources, personal and impersonal, oriented on the duration and development and cultivating values. Appointed by the founder to meet some of the needs, expressed in the form of an order. The header is implemented in the context of cultivation, forming together with them the organization theme.

The organization – like every collection – has limits and internal structure.² This includes real and conceptual resources. Personal resources are objects in the form of social roles, resources, non-personal objects to the material-energetic objects and conceptual (information) other than the established theme/goal³ and social roles. Collectively ordered motive/purpose implies coexistence of characteristics of totality, complexity and systemic character (see Krzyżanowski, 1992, pp. 125–130). Models of metastructure organization are shown in Figure 1 and Figure 2.⁴

Imposing a theme/goal orients an organization towards the effectiveness of its implementation and its efficiency. Only organization lasting in a natural social and economic environment can implement a theme/goal efficiently and effectively, which requires the ability to adapt and grow. Living systems that belong to the class of open systems possess such abilities. In terms of systemic organizations – as hosting subjects – they are open systems. Primary features of open systems are: (1) separation, (2) penetrating zone boundaries, that is, input and output (3) flows through the input and output, i.e. the impact, (4) transformation of inputs to the outputs. Each organization possesses such features.

² The collections from the collective mathematics, see Pietruszczak, 2000.

³ Theme to ... /orientation theme.

⁴ As to limits of an organization from the perspective of a complex adaptive system, see Nowak, 2014, p. 131.

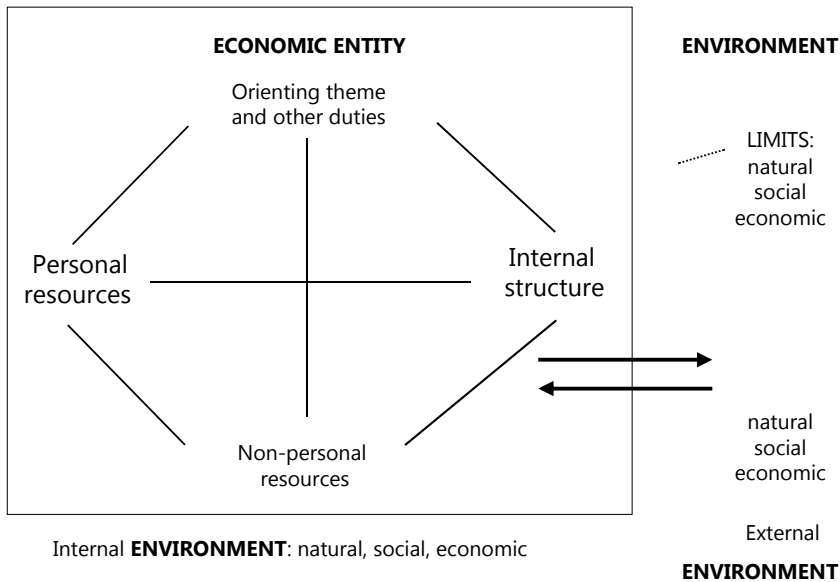


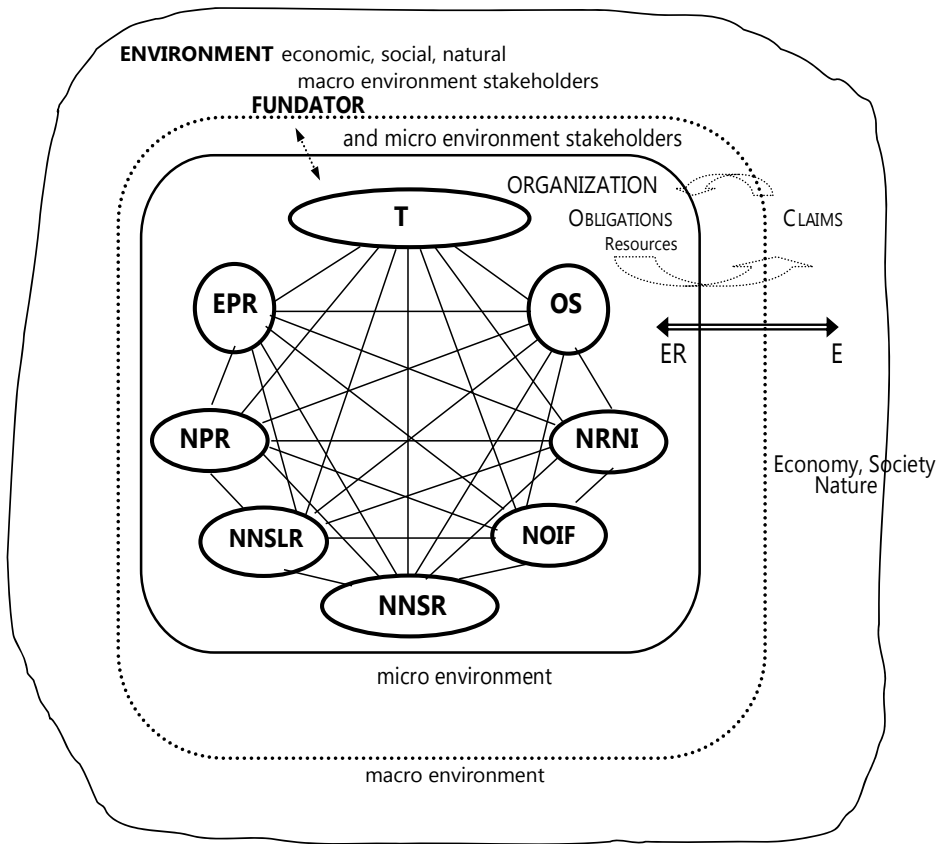
Figure 1. *Metastructure defines the organization as a subject of economic subject.*

Source: based on Nowak, 2010, p. 232.

Organizations are among the class of living systems (living systems) (Miller, 1978, Section 4.2.9; Parent, 2000), which is a subclass of complex adaptive systems (CAS) (Gell-Mann, 1994, pp. 20–21, 297). Secondary features of living systems – in short, the secondary features of a system – that is the secondary characteristics of system organization are: (1) limit, (2) feedback, (3) cyclical nature of an operation, (4) negative entropy, (5) homeostasis, (6) propensity for growth and expansion, (7) the harmonization of homeostasis and adaptability, (8) equifinality (Katz & Kahn, 1978, pp. 23–30, for Robbins, 1990, pp. 15–19). A special feature of an organization is the extensive use of money (medium of exchange), as a factor determining flows through the input and output. Models of the dynamics of an organization are shown in Figure 3 and Figure 4. The model shown in Figure 4 illustrates the immanence of stakeholders and their categories and types of inter-organizational relations that determine the formation of markets.

In terms of secondary system features, critical terms of duration and development of an organization will be (Nowak, 2014, p. 130):

- **prerequisite exchange capacity**, which is the proper intensity and a continuous stream of suitable medium of exchange/cash (*exchange capacity*),
- **sufficient condition of possible negative entropy and stable state** (stopping entropy, negative entropy), or the ability to generate adequate surpluses of objects import from the environment over their consumption and export from the environment (negative entropy + homeostasis + adaptability).



- T theme orientation (founder's need, which is satisfied and inspires the creation of an objective pursued in the framework of cultivated values),
- EPR executive (managerial) personal resources (the dominant internal stakeholders),
- NPR non-executive (non-managerial) personal resources (non-dominant internal stakeholders),
- NNSR non-personal non-informational substantial resources,
- NNSLR non-personal non-informational substance less resources,
- NRFI non-personal resources of financial information,
- NRNI non-personal resources of non-financial information,
- OS organizational structure, which is a collection of its internal formal and informal relations, including calculating relations,
- ER relations with the environment, including relations of calculation,
- E environment/economic, social, natural environment.

For eight elements:

The number of internal relationships = $[n(n-1)]/2 = [8(8-1)]/2 = 56/2 = 28$
 The number of internal interactions = $n(n-1) = 8(8-1) = 56$

Figure 2. Operationalized octagonal organizations' metastructure.

Source: Nowak, 2014, p. 128.

It should be noted that the necessary condition is a part condition for the survival and development of an organization. A complete condition is a sufficient condition. Functioning of an organization requires both conditions playing a role of imperatives, initiation of implementation which follows the principle of spontaneous self-regulation. In addition, organizations as complex adaptive systems have a general tendency to develop, which may be followed by learning, evolution, replication and/or aggregation of existing organizations with the use of favourable opportunities (Gell-Mann, 1994, pp. 19–21, 241–242). Aggregation of organizations leads to composite organizations, having the same system characteristics as a singular organization. Within composite organization exists coadaptation which involves simultaneous competition and cooperation of component organizations.

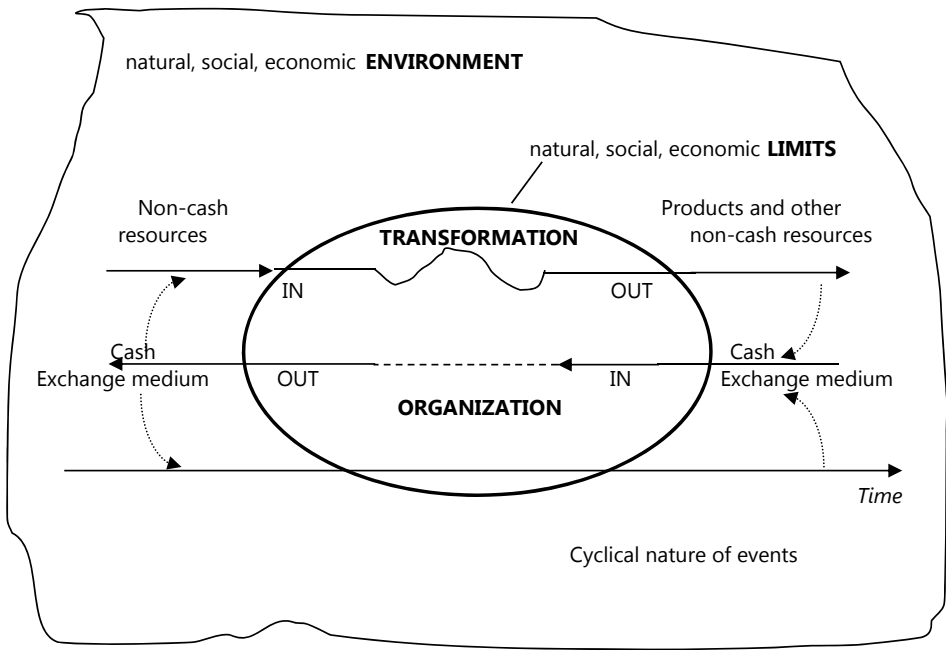


Figure 3. *Metamodel of an organization as a living open system/Process metamodel of an organization.*

Source: based on Nowak, 2010, p. 238.

2. Shaping an organization as a hosting entity

The impact on the form and functioning of an organization can take place only by means of shaping elements of a metastructure and flows within it. Such shaping requires observability – direct or indirect – and controllability, states and dynamics of characteristics significantly related with these elements and flows. Such characteristics constitute tertiary ones, superstructured system features on the primary and secondary ones. Nine characteristics of the tertiary system can be distinguished, due to its emergency, immanence and relevance called key features of the system or the fundamental attributes of the system (Nowak, 2014, p. 127). These features include: (1) identity, (2) structurability (3) periodicity (4) wealth, (5) being obliged (6) gratification provision (7) surplus creativity (8) self-description (9) the ability of signalling and communication (Nowak, 2014, p. 127).⁵ These features emerge in the formation of an organization and disappear with its collapse. Any existing organization possesses them. They are attributes of an organization as a whole, in the economic, social and natural dimensions. Their states are interrelated: the change in the status of one of them involves a change – significant (material) or immaterial (immaterial) – of the status of the remaining ones.

As system ones they are invariant with respect to place, time, size and orienting theme of a hosting entity/organization. Each feature includes a plurality of components constitutes a multicomponent.

The collection of fundamental states of system attributes (key system features) for a given moment of time is the system position of an organization or – the location of a system, the situation of the system, briefly – position, location, situation. The change in time is dynamics, therefore repositioning of an organization is its dynamics. Orienting factors of a system position of an organization will be imperative terms of duration and development of a complex adaptive system. From the perspective of the tertiary system features such conditions take the form as follows (Nowak, 2014, p. 130):

- **the condition of necessary gratification provision** (*necessary liquidity, possibility of the necessary exchange, necessary condition*) – adjustment of gratification provision (ability to pay) for collected resources and accompanying obliging, that is, the intensity of proper and adequate continuous stream of medium of exchange/cash (exchange capacity),
- **condition of sufficient surplus provision** (*sufficient surplus, deterring entropy, satisfactory/sufficient condition*) – adaptation of surplus provision to collected resources and accompanying obliging, thus the ability to generate

⁵ Communication as an action in the sense of communication by Habermas (1999, pp. 180–190). According to the systems approach, case study as a research method should include the states of these attributes and their dynamics.

adequate surplus of imported resources over used and exported resources (negative entropy + homeostasis + adaptability), and adaptation of self-report and signalling to the information needs of stakeholders and effectiveness of communication with them.

It should be emphasized that the initiation of the implementation of these mandatory conditions is based on the principle of spontaneous self-regulation, then

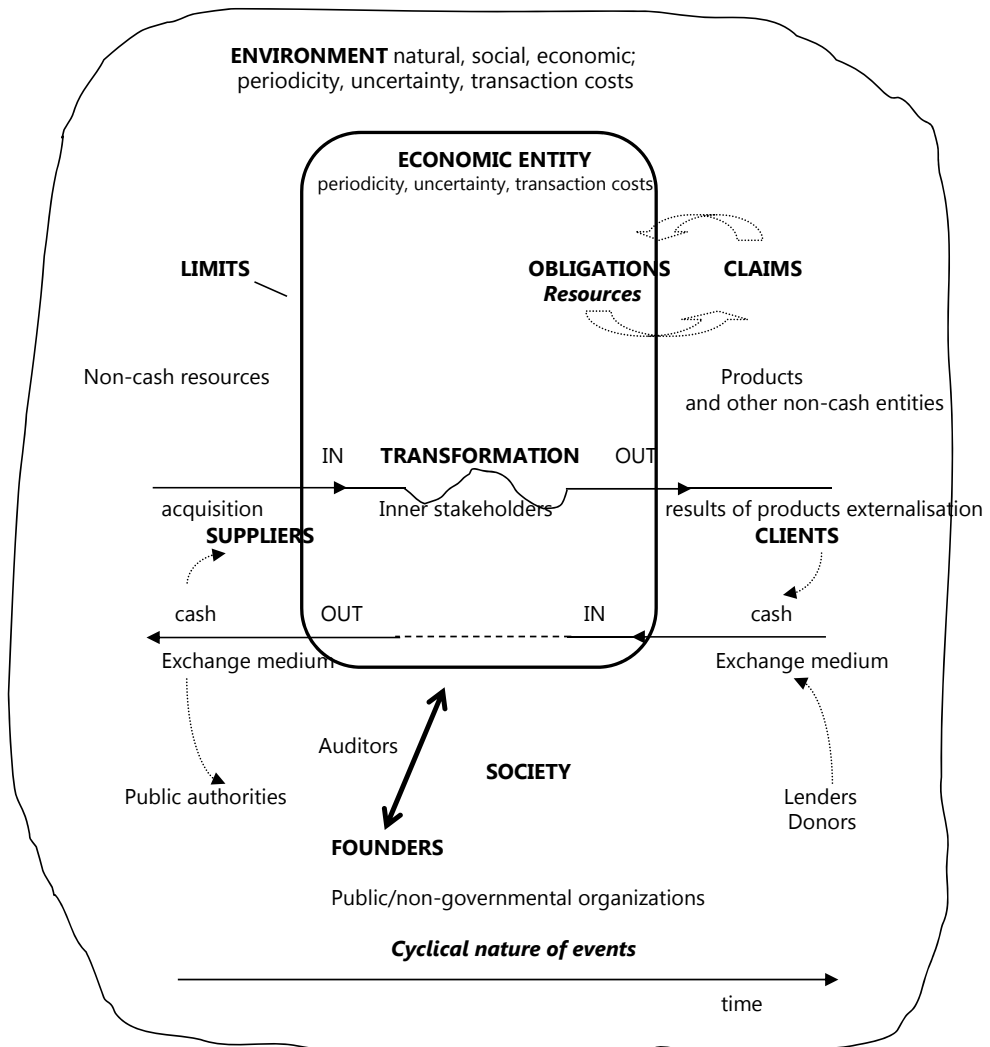


Figure 4. Operationalized metamodel of an organization as a living system with a determinant (medium) of exchange in the form of money/Process metamodel of an organization.

Source: based on Nowak, 2014, p. 129.

modified effects on the states of the fundamental attributes of the system. These interactions have their sources both inside (within) hosting entity/organization and outside it (in the environment). Some of them are observable and controllable, only part of them observable and part unobservable. Observability makes it possible to generate information, and this allows one to control.

It is worth highlighting that the information is the foundation of the operation of complex adaptive systems. Their inherent feature is collecting and disposal of data and information, forming maps of the world and keeping them within the boundaries (Gell-Mann, 1994, pp. 23–24, 154–156). It is completed in the mode of self-creation of an internal self-subsystem, which on the basis of inspection of the reality of the inner and outer reality abstracts constructs, concepts and patterns of action, organizing them into specific images, revised with the impact of the influx of new observation data (this is a complex adaptive system) from inside and – through the input and output areas – its environment (Gell-Mann, 1994, pp. 23–25, 154–156, 242, 318, 370, 373–374). This is the kind of a particular information as a result and basis for overview/self-report and prediction of reality as well as forming behavioural patterns by a complex adaptive system. The ability of a complex adaptive system to create schematum is emergent in nature i.e. it arises, develops and disappears with it. It is a product of the inherent properties of any complex adaptive system, oriented towards absorption and transformation of the data stream.

3. Management

For the survival and development as well as the implementation of orienting theme, special importance will be paid to intentional impact on the states of the fundamental attributes of the system to determine the intended position of the system entity/organization. Like any other impacts, intentional impact may have its source within the organization or outside it, or inside the organization or outside it. System position of a hosting entity/organization can be formed only by changing the states of the fundamental system attributes. Just the regulation of these changes is the subject of management.

Management is the system of empowered intentional inner shaping, or omission of forming the impact or cover, aimed at states and the dynamics of the fundamental attributes of the system, to fulfil critical conditions for survival and development and the implementation of orienting theme, or to bring these states to the levels preventing further existence. Targeting management impacts and covers is presented in a tabular form (Table 1).

Table 1 Targeting management impacts and covers

| Fundamental system attributes | Areas | | |
|--|----------|--------|---------|
| | Economic | Social | Natural |
| 1. Identity | | | |
| 2. Structurability | | | |
| 3. Periodicity | | | |
| 4. Abundance | | | |
| 5. Obliging | | | |
| 6. Gratification provision | | | |
| 7. Surplus creation | | | |
| 8. Self-report | | | |
| 9. Ability of signalling and communication | | | |

Management requires observability and controllability of essential components of the fundamental system attributes, in all three areas of a broadly understood environment, that is the economic aspect, the social aspect and the natural aspect.⁶ It also requires determining the status and dynamics of the desired and real ones, and shaping the trajectory of their arrangements.⁷ This implies the need to plan (in different time horizons), determination of the current state and the regulation in management (management control). The realization of this need is supported by the information system of an organization, which critical component constitutes accounting.⁸

4. Quality of management

The concept of “quality” has two general meanings. In the first sense, the quality is a distinguishing feature or characteristic of an object and in the other – the quality is a collection of features and characteristics of an object, allowing the formation of specific relations with highlighted objects in the environment.⁹

⁶ Each of these aspects is the size of the sub aspects.

⁷ From the perspective of systems theory, management is the control of the organization, in the narrow sense – economic control rooms.

⁸ Accounting allows mapping and prediction, in terms of the medium of exchange (money), conditions and dynamics of the fundamental attributes of the system (Nowak, 2010, pp. 246–254).

⁹ According to ISO 8402–1986 “quality is generally the features and characteristics of the product or service to meet the needs stated or implied.” ISO 9001: 2000 quality is “the degree to which a set of inherent characteristics fulfills the requirements,” wider Wawak (n.d.).

As to the first, the quality of management – defined as in the previous point – is furnishing management system with features and characteristics suitable for the impact on the fundamental attributes of the system, individually and collectively. In the second meaning it is understood as the measures of the scope and structure of that remuneration. In the second sense, the quality of management is the degree of compatibility with a collection of features and characteristics of the management system with the dynamic position system of an organization. Understood as measures of quality management are: the degree of implementation of the condition necessary to gratification provision, the degree of implementation of the condition sufficient surplus provision, and the degree of realization of the orienting theme. It should be emphasized that both aspects of quality management refer to each of the existential areas of an organization, that is, areas: economic, social and natural.

At the social level, the stakeholders of an organization (Figure 4) form a system of social activity. According to the functionalist sociological theory in terms of Parsons (1961, pp. 369–372), each system of social activity has four functional imperatives, it is the function of adaptation, the function of achieving the objectives, function of integration and function of cultivating designs. Each of these functions contains a proper medium of exchange: adaptation – money, achieving goals – power, integration – influence, cultivating patterns – duty (to oblige, values). Management affects the scope, manner and degree of implementation of these imperatives and the shape of their respective media of exchange, i.e. money, power, influence and obligations of stakeholders. Quality of the management in the social area can also be measured by the scale of its impact on the status and dynamics of the exchange media stakeholders.

Moreover, one should pay attention to the cost of quality management. Congruence management system for dynamic position system requires prevention of insufficient compatibility with the adequacy and levelling effects of that failure prevention. Prevention includes shaping the management and the current detection of the degree of its adequacy (audit), and require the levelling effects of the failure of this system occur inside and outside the organization. Both prevention (formation and detection), and offsetting the effects of failure (internal and external), requires an appropriate use of resources, which entail costs (these are the monetary measure of resource consumption). The costs of quality management is the sum of the costs of prevention and costs of failure. They reach a minimum when prevention costs and costs of failure are equal, which results from the theory of quality costs (e.g. Nowak, 2001, pp. 556–259).

Conclusions

The application of systems theory approach allows one to define the fundamental design and system attributes of an organization and the critical determinant of its survival and development. Through this it becomes possible to formulate the definition of system management and quality management as well as the concept of quality cost management. These results are universal and apply to all organizations. They shed new light on the nature of organization and management. At the same time they are susceptible to the operationalization.

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Innovations in quality assurance as an element of the company's competitiveness

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Abstract

The aim of the article is to analyze and evaluate marketing innovations used in quality assurance as well as develop the model of differences and similarities between them. Innovations are understood in this case as generating new value for the customer. Strong market competition makes it necessary for companies to gain customers' trust. For this reason, marketing innovations, including those relating to quality assurance, may take the form of a tool (instrument) of trust. However, they must be very attractive for the customer and stand out on the market.

The adopted research method is the qualitative analysis of foreign and Polish literature, including legal regulations. Prolonged, extended, door-to-door, and lifetime warranty was taken into account. The model of similarities and differences of innovative activities in quality assurance allowed for establishing that the warranties analysed do not significantly differ among one another. However, each one is a "step forward."

Paper type: review article

Keywords: enterprise, competitiveness, quality assurance, warranty, innovation, value for customer/consumer

Introduction

The complexity of the socio-economic reality and the increasing competition of enterprises as well as the complexity of the processes occurring in them make it necessary for the customers/consumers to become increasingly aware of the value cre-

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ated for them. This requirement is highlighted by Simon (1995, p. 14) claiming that enterprises still have to acquire the right to exist all over again.

Today, innovations are considered the key to the competitiveness of enterprises, and the ability to innovate allows them not only to survive, but also to develop and grow (Janszen, 2000, p. 5; Timmerman, 2009, p. 6; Brdulak & Gołębiowski, 2003, p. 18; Knosala, Boratyńska-Sala, Jurczyk-Bunkowska, & Moczala, 2014). The volatility of the environment results in the fact that businesses are forced to make changes in their business activity and to adapt their strategies to not only threats but also opportunities emerging. In the literature of the subject one often draws attention not only to the benefits innovations bring to enterprises, but also to new values for the customer/consumer and stakeholders (e.g. Sullivan & Dooley, 2009, p. 5; Timmerman, 2009). It is also stressed that innovations are both single and multi-dimensional (Garcia & Calantone, 2002; Salavou, 2004). For this reason, innovations concern a wide variety of activities, including activities in the area of quality assurance which could be a marketing factor for the company's competitiveness.

The idea of quality assurance boils down to the claim that the complex technical structure of products results in the manufacturing process including errors, or deviations from the requirements, which are often impossible to detect in the early stages of the manufacturing process. The manufacturer does not want to be perceived in terms of unreliability of business. Regardless of legal privileges, he voluntarily gives consumers extra attractive and new privileges distinguishing him from the competition. Quality assurance as a marketing tool must in fact take the form which may gain the trust of the consumer.

Therefore, the aim of this study is to analyse and evaluate marketing innovations used in quality assurance, as well as to develop a model of differences and similarities in their structures. The following have been taken into account:

- prolonged warranty,
- extended warranty,
- door-to-door warranty,
- lifetime warranty.

The applied research method – qualitative analysis of foreign and domestic literature, including legislation – allowed us to achieve the aim. This study is only an outline of the issues requiring in-depth research in the future.

1. The nature and importance of innovation

The term innovation is associated with something new that could improve the status quo. Although Schumpeter, an Austrian economist, in a book entitled *The Theory of Economic Development* published in 1934, first used this concept in relation to

the events associated with the launch of a new product, new technology, new market for goods, acquisition of new sources of raw materials and new structures and organizational methods, in the new socio-economic conditions the term refers to a number of various activities (Schumpeter, 1960, p. 104). It should be emphasized that Schumpeter called innovation an essential factor in economic development (Fiedor & Kociszewski, 2010, pp. 162–163). Thus, the narrow meaning of innovation relating to the former invention together with the development of new concepts of management expanded primarily on the processes leading to the creation, production and marketing of new products and services intended for the customer/consumer. According to Janasz and Koziol (2007) the term has technical roots, but now has become a factor of economic competitiveness of enterprises. Innovation started to be defined as generating new value. This aspect was highlighted in the statements by Drucker (2004, p. 29) who associates innovation with the continuous search for changes and a source of wealth and Kotler (1994, p. 85) who stresses that innovation is related to the choice of new value, its creation and delivery to the market. Similarly Tidd and Bessant (2011, pp. 89–91) argue that innovation refers to the process of creating something new. This process includes: searching for opportunities to innovate the result which creates an opportunity to generate new value and its practical implementation. It is necessary to mention the interpretation of innovation by the *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data* (2005, p. 48) describing standards regarding innovative activities of enterprises. Innovation is understood as the introduction of a new or improved product, the use of the improved process, it may also involve changes in the methods of management, organization of production of work conditions, and qualifications of personnel. As you can see innovation does not relate to the creation only (e.g. product, process and organizational innovations), but includes aspects of marketing aimed at gaining the trust of the customer (marketing innovations).

2. Quality assurance and approach to innovations

Quality assurance is considered a particular area of innovative activities of companies associated with product liability. The need for innovation in this area is the reflection of ever widening globalization (Malara, 2006; Boutellier, Gassmann, & von Zedtwitz, 2008). Innovation understood as the ability to generate new value is seen as a dialogue of manufacturers of goods and their consumers (Tapscott, 1998). The Japanese as early as in the 80s recognized innovation as a factor of competitiveness of “tomorrow” (Pfeifer, 1993, p. 48), and in the 90s in the European Convention on Quality in Paris it was considered an essential factor in competitive actions (*The roots of quality*, 1998) and the quality was not a factor of competitiveness but a necessity (Kaplan & Norton, 2001).

The literature of the subject has not developed a uniform definition of quality assurance. This concept is not widely interpreted. Nevertheless, one can notice two approaches:

- warranty as a unilateral action,
- warranty as a contract – additional claim in relation to the fundamental contract.

In the first approach – the warranty is aimed at the consumer – it requires the seller to remove any incompatibility. The content of this declaration must be in accordance with basic statutory requirements. The link between the seller and the buyer is the purchase of the product. What matters is only one party in the contract – the guarantor (Wieczorek, 2005; Pecyna, 2012).

In the second approach – what is emphasized is the direct connection of the warranty with the sale-purchase agreement. Warranty treated as a contract constitutes a voluntary additional condition referred to the basic agreement. The consumer has a choice (they may agree or not agree). If they do not accept such a solution, there will not be any new rights and obligations related to the warranty on their side. The same applies to the guarantor. In addition, the literature emphasizes the elements that allow the recognition of a particular document as the warranty statement. These include, inter alia, an indication of characteristic properties of the product marketed, obligation to remove any non-compliance and consumer rights (Stefanicki, 2006).

In this study it was assumed that quality assurance is an additional privilege independent of legal provisions which the guarantor voluntarily grants to consumers in the case of the claim of defect of the product purchased by them (goods, products). The aim of the guarantor is to gain the trust of the prospective consumer. They assure that they are capable of ensuring a sense of consumer safety and in the case of non-compliance they are ready to redress for their grievances. The scope and content of the warranty must be greatly varied to be a factor of competitiveness and so that the consumer can follow their content when purchasing goods (more Zymonik, 2015, pp. 230–246).

Interpretations of the concept of the warranty are similar. The most common problem researchers cite in their studies are the legislative regulations of the Community and national law. The review of these regulations in terms of complex issues related to quality assurance leads to the conclusion that the scope for interpretation is very similar in them. There appears the term “guarantor” that declares that they will protect the buyer in the event of the claim of defect of the product purchased. This means that they are committed to redressing the consumer grievances in the case of the inconsistency of the product with the agreement.

The actions of the guarantor can lead in two directions:

- inclusion of standard elements used by the competition in the warranty,
- introduction of provisions used to a limited extent by competition or those which it does not use at all.

In the first case, the producer, who is the issuer of the guarantee is focused on components that can be found in every warranty document, that is, the headquarters of the guarantor, the duration of the warranty, place of its submission, the obligations of the guarantor and the permissions of the buyer. Only on their basis do they create differences which will be visible to the consumer.

In the second case the guarantor departs from the accepted standards and offers new solutions which might include:

- providing consumers with the warranty longer than the one offered by the competition,
- granting consumers more privileges than in the case of a typical warranty,
- increasing the scope of responsibilities of the guarantor,
- facilitating the submission of warranty claims.

Another field of activity of the economic organization, seeking within the quality assurance competitive advantage, is the introduction of provisions that other economic organizations apply to a limited extent or do not apply at all. This implies the need to make decisions that will overtake the actions of other guarantors. Nevertheless, these decisions must be thought over so that the organization applying them is able to fulfil them.

3. Model approach to innovative warranty solutions

The most recognizable innovative activities within quality assurance include: prolonged warranty, extended warranty, lifetime warranty and the introduction of the door-to-door option. This list does not exclude possible innovative activities of the guarantor. The most popular options have been listed here (more Zymonik, 2015, pp. 247–255). However, what stands out here are the activities aimed at prolonging the period of warranty protection or extension of its terms and conditions. The starting point for this type of solutions are basic warranty conditions and its duration. On their basis, the manufacturer introduces the indicated innovations that constitute the extension of provisions contained in the standard warranty document. They may include, for example: theft, burglary, fire, flood and mechanical damage (Tez, 2012).

Therefore, diverse variants of protection are created and presented to the consumer upon the conclusion of the contract. On the one hand they can choose a basic guarantee, and on the other prolonged and extended. Moreover, the manufacturer may present a buyer with several options within a single innovation (e.g. different versions of the extended warranty). This is particularly evident when ordering home electronics and appliances via the Internet. The options of prolonged or extended warranty quite often appear in this industry. This is due to the fact that the

life cycle of these products is becoming shorter. On the one hand, the reason for that is the use of poor quality (and cheaper) materials to produce the final product, and on the other – the introduction of extensive electronics and sophisticated software. Manufacturers explain this type of action by saying that they strive to ensure that prices for their products are affordable for every buyer. What should also be emphasized is the short life cycle of appliances due to technical progress (*Przedłużona gwarancja do telewizorów: czy warto kupić*, 2015). Thus, it may turn out that the duration and scope of the standard warranty will be insufficient to provide consumers with sufficient protection.

Given that the extension of the warranty is supposed to increase the attractiveness of the product and to improve its competitiveness, there is some doubt about burdening the consumer with additional costs if they want to take advantage of such innovations.² Consumers, when using the product, risk (e.g. in the case of flooding of the appliance or the occurrence of mechanical damage). Nevertheless, the consumer may financially benefit from this situation. The result of this is the possibility of refunding the value of the entire product and the option of receiving a new model for free. It can be illustrated by the consumer who has been using a TV set for 3–4 years. In the case where it is unprofitable to remove the defect (e.g. in the case of damage to the matrix) and this model is not available on the market, the buyer will receive a new and improved model free of charge.

Innovative activities of the manufacturer within quality assurance may also rely on the introduction of the door-to-door option and making it lifetime. These conveniences allow the consumer to save time and costs associated with the delivery of the product to an authorized service centre and provide them with protection for the period of production of given goods. In the first case the warranty privilege is carried out at the consumer's home. It is the guarantor who collects the defective product from the consumer's home, and after its repair delivers it to the consumer. They bear transportation costs and costs relating to possible disassembly and assembly. Door-to-door is not only a supplement to the basic warranty, but it may also be the part of the extended warranty. The main responsibility of the consumer is to preserve the original packaging in which the product will be sent for repair. The indicated innovation can be particularly useful to the consumer in a situation where he/she may have problems with self-transportation of the product due to its large dimensions (e.g. wardrobes, refrigerators, washing machines, etc.). The second of these innovative solutions can raise some interpretation doubts. This is due to the lack of a universal interpretation of a lifetime warranty. In fact, it is the manufacturer who defines its meaning. The meaning of a lifetime warranty may therefore be manifold. It is often linked to the life cycle of the product and the produc-

² Only some manufacturers decide to introduce prolonged or extended warranty for free. For example, Toshiba introduced this for some models of laptops and Bosch for electro tools and the blue-line measuring instruments.

tion of its series. It, therefore, can apply for as long as the products of a given series are manufactured. One can find provisions that associate the lifetime warranty with the length of the life of the consumer. An example is the AVC warranty on all the SMART exchangers of hot water. In accordance with its terms, it is applicable at the place of residence of the consumer, where SMART has been installed and ends with the death of the person who registered this warranty (Intrata S.C., n.d.). Unfortunately, a lifetime warranty is not always accompanied with the precision as in the example above. Imprecise duration of protection during the use of the product constitutes a threat to the interests of the consumer. The period of the lifetime warranty is not always highlighted. In such a situation it puts the attractiveness of the innovation applied into question. Theoretically, it could lead to a paradoxical situation where the consumer purchases the product, and a week later receives the information that the production of this series of products has been ceased. In this case, the product was covered by the protection warranty only for 7 days. With this in mind, manufacturers who want to reach buyers with their offer by enriching it with a lifetime warranty must clearly explain its meaning and duration to the buyer. Benefits for the consumer may be quite significant here. From the moment of the purchase, the production of the series may take several years.

The presentation of the above examples of innovative measures taken by the manufacturer in quality assurance encourages one to propose a model of the similarities and differences in their structures. It was illustrated in Table 1.

Table 1 *Model of the similarities and differences of innovative activities in quality assurance*

| Differentiator of similarities/differences in innovation | Prolonged warranty | Extended warranty | Door-to-door warranty | Lifetime warranty |
|--|--------------------|-------------------|-----------------------|-------------------|
| Duration of warranty with innovation is clearly indicated | yes | yes | yes | no |
| Indication of entities responsible for its implementation | yes | yes | yes | yes |
| Burdening the consumer with extra costs | yes/no | yes/no | no | no |
| Innovation protects the consumer only in the case of a claim | yes | yes | yes | yes |
| Innovation is used in separate warranty (independent of the basic one) | yes/no | yes/no | no | no |
| Obligation to deliver the product to the service centre | yes | yes | no | yes |
| The solution applied is a factor of competitiveness | yes | yes | yes | yes |
| Universal interpretation of the innovation applied | yes/no | yes/no | yes | no |

The similarities and differences in innovation solutions used in quality assurance show high convergence. Each of the solutions represents a “step forward” compared to standard warranty options. One can also see some differences, but they do not affect the order introduced by the guarantor. It should be emphasized that the scope of protection of one of them (extended warranty) is greater than in other cases. The guarantor is focused here not only on the longer period of its duration (extended warranty) or individual privileges (the door-to-door warranty), but it defines a comprehensive suite of complaint privileges. However, it should be emphasized that all the selected innovations are based on the provisions of the basic warranty. It constitutes a kind of basis for improvement actions. In the case of using some of them, the consumer is charged with additional costs (prolonging or extension of the warranty). Manufacturers explain this with higher level of responsibility for the quality of the product than in the case of the standard warranty (e.g. they are also responsible for accidental damage to the product).

Conclusions

The analysis conducted confirms the growing role of quality assurance as a factor of competitiveness. Its full use which could be beneficial to the manufacturer will be possible only when they focus their actions on innovative solutions. Introducing them into quality assurance will not determine the selection of the offer by the consumer, but will increase the likelihood of at least drawing the attention to the product. The scope of these solutions cannot be accidental, deviating from the expectations of buyers. The proposed solutions cannot be occasional. They must be stored for a longer period of use. What's more, their practical implementation must be friendly enough for the consumer so that the guarantor does not lose its credibility to their buyers.

The issues addressed in this study require further and in-depth research. One should determine the value of the benefits of each of the identified innovations for consumers and the guarantor. In addition to that, it is worth identifying the leading innovation that brings the greatest benefits for the parties to the agreement. These studies will help determine which of these expectations are possible to meet, and which of them should be executed in the form of different kinds of law regulations in the first place.

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