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# THE ROLE OF THE STAKEHOLDER IN THE QUALITY IMPROVEMENT OF AN ORGANIZATION

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**Purpose:** Contemporary management seeks ways to foster competitiveness and to enhance organizational development. This can often be achieved by carrying out activities that identify and monitor stakeholder expectations and requirements. This article aims to show the importance of stakeholders in the improvement of quality in an organization.

**Design/methodology/approach:** The multi-faced and multi-dimensional nature of the issue (the role of a stakeholder in the quality improvement) and the identification of the covered research areas was accomplished by means of a two surveys conducted in years 2011-2014 in the Central Pomeranian region. The first survey was done in January-April 2011 and the second in November 2013-April 2014. Therein, 600 organizations were interviewed in the first and 1107 in the second survey.

**Findings:** The study shows that stakeholders consciously influence quality in an organization, which directly affects the need to improve quality (e.g. by the implementation of management systems), enhancing trust, the satisfaction of the entities and the competitiveness of the organizations. The use of management systems by organizations (e.g. ISO 9001), allows companies to adapt to the identified market needs.

**Originality/value:** The results confirmed a correlation between the stakeholder and quality, as the relationship between the quality and the internal/external stakeholder determine improvement of an organization (perceived as a process). This results in, inter alia, the need to continuously monitor and improve the processes, as well as to assess the level of parameterization through the implementation of the management system (e.g. ISO 9001). The stakeholders are important determinant of quality.

Keywords: stakeholder, quality, management system, improvement.

Category of the paper: Research paper.

## 1. Introduction

In order to operate and to be competitive in a rapidly growing market, organizations are required to carry out intensive activities to identify the needs and expectations of stakeholders, and providing services (development of products) in compliance with the designated and accepted directions and requirements of the pro-quality management of an organization. One of the most important determinants of implemented strategies is stakeholders' satisfaction, a correlation of quality of goods/services offered by organizations. This means that in the age of digitalization, mobility, globalization, the growing awareness of stakeholder-held possibilities, in particular, the impact they have on organizations makes it more important to evaluate their level of satisfaction. A skillful and effective improvement of the organization's management processes, as well as a systemic approach to quality development allows an organization to achieve a specific market position, an enhanced level of competitiveness and to develop effective relationships and cooperation with stakeholders. Economic operators will not achieve market success if the undertaken improvement measures are not aimed at quality, which to a specific degree affects the price, loyalty (trust), flexibility or communication skills (ease and effectiveness of communication).

#### 2. Literature review

Stakeholders play an important role in the functioning and the development of an organization, an industry and a market, as they are the main development engine of any changes. This in relation to quality studies, can be compared to the Deming circle, more commonly known as the PDCA (Plan-Do-Check-Act) (Hamrol, 2008, Olkiewicz, 2018). In the management process, it can be assumed that stakeholders are individuals or teams that affect the operation and the development of an organization or are subject to its impact. As a consequence, there is a lack of an unambiguous interpretation of the stakeholder's definition in the professional literature. Accordingly, a stakeholder is:

- a group or a unit that can affect or can be affected by the organization's actions, e.g. strategies, management systems, products, services (Freeman, 1984),
- all those who are interested in a company, its activity and achievements (EFQM, 2007),
- persons or groups of people interested in any decisions an organization makes or any activities an organization undertakes (PN-EN ISO 26000:2009).

- a concerned party a person or a group of people interested in the operation or achievements of an organization (PN-EN ISO 9000:2006),
- a person or an organization, which can affect/be affected or perceive themselves as dependent on the decisions/actions made by an entity (PN-ISO 31000:2012),
- all organizations independent of the environment, in which clients, business owners and other functioning groups can influence organizations (Westrenius, and Barnes, 2015).

These definitions indicate that the unification of the identified shareholders does not necessarily has to be difficult as it can include any entity (both economic and civil) that has an impact on and can determine the activity and development of an organization. The simplified approach allowed creating a criterion that is based on the significance the stakeholders have to an enterprise (Dąbrowski, 2010) by dividing them into two groups:

- main stakeholders they have a direct impact on the organization's activity (i.e. owners, tenants, clients),
- secondary stakeholders non-governmental organizations and media that have an impact on the main stakeholders actions through the formation of public opinion.

There are also several subdivisions of stakeholder groups in the professional literature, including: government, society, customers, shareholders, employees, suppliers, investor, prosumers (Isopeskul et al., 2016; Garoui, and Jarboui, 2012; Paliwoda-Matiolańska, 2009); internal and external stakeholders (Kostera, and Śliwa, 2012; Werther, and Chandler, 2011; Freeman et al., 2007); local, regional, national and international stakeholders.

		<b>PROSUMER</b> recipient of goods	
CUSTOMER the buyer of goods or services, remains affected by the product	CONSUMER an entity that uses the products (purchased previously by him); directed at increasing consumption; driven by needs, desires and satisfaction from purchasing goods and experienced services	and services; active in realations and cooperates with companies	

**Figure 1.** Complexity in the identification of stakeholders. Source: own study. It should be noted that in literature the most frequently cited categorization of stakeholders is the one that is based on the type (Łudzińska, 2013; Nita, 2016) e.g. internal type (owners, shareholders, supervisory boards, employees) and external type (competitors, suppliers, trade unions, customers, state authorities, media, financial institutions and specific interest groups).

The impact that specific stakeholder groups have on organizations can have an economic, social, organizational and cultural aspect.

The level of persuasion they have on a company and the degree to which their expectations are taken into account depends on (Paliwoda-Matiolańska, 2009a):

- the power of a stakeholder to affect an organization (an ability to influence and affect the way an organization and other people operate),
- the ability to prove, both ethically and legally, the relationships with a company,
- priority (fast response to the identified requirements and expectations of stakeholders).

This means that an internal stakeholder (of an organization) (Werther, and Chandler, 2011) is essential to the proper functioning and development of an organization, while an external stakeholder only indirectly affects an organization. Companies wishing to function properly and to develop should focus, apart from financial, organizational and technological aspects, on the analysis of interactions resulting from a *quality-stakeholder* correlation (Olkiewicz et al., 2017; Olkiewicz, and Wolniak, 2018; Wolniak, 2018).

A stakeholder-oriented direction, which includes theoretical and practical models, concepts, tools that support the decision-making process of an organization, can focus on the important parameter of quality (PN-EN ISO 9004:2018; PN-EN ISO 9000:2006; PN-ISO 10014:2008; EFQM, 2013; Garoui, and Jarboui, 2012).

This is also linked to the bond between stakeholders and organizations, as well as the strength of the generated relations achieved through the evaluation of:

- unsatisfactory quality (incompatible with the expectations Q < 0),
- satisfactory quality (in line with expectations, satisfying the needs of stakeholders Q = 0),
- quality exceeding expectations (satisfying the needs of stakeholders in excess and increasing the level of new needs Q > 0).

This can result in rational or irrational stakeholder behaviour – which, in turn, will affect organizations in various ways and to variable degrees of intensity. This shows that stakeholders can have a significant positive or negative impact on an organization.

The stakeholder-quality created relations presented in Figure 2, could in fact be the dependent variables in the development process of an organization (Olkiewicz, 2017; Olkiewicz et al., 2019), as well as in its quality improvement and management system.

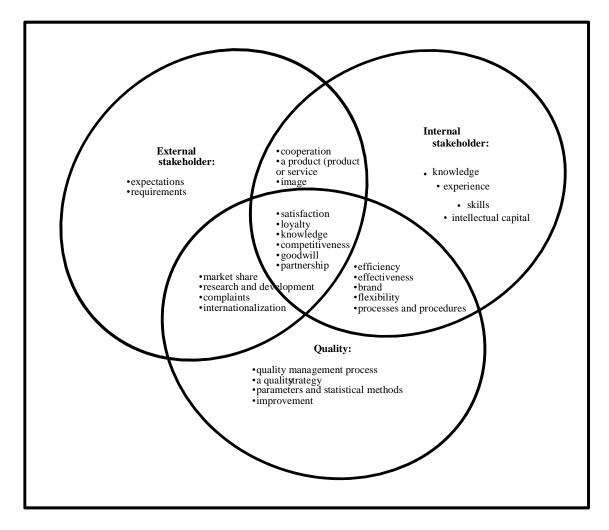


Figure 2. Quality-stakeholder relationship. Source: own study.

From the point of view of quality improvement within the management system, the stakeholder-orientated approach has gained importance due to the reason that eight quality management principles (customer orientation, leadership, employee engagement, process approach, system approach to management, continuous improvement, decision-making based on facts, creating beneficial relationships with suppliers), expressed in the requirements of the ISO 9001 standard, are strictly in line with the stakeholder-quality orientation.

## 3. Material and methods

The methodological assumptions and aims of the study are a result of author's interest in the subject of the improvement of organization's management, in particular, quality management. The research problems were formulated in the form of questions:

- Q1: Are stakeholders aware that they have an influence on the improvement of quality in an organization within standardized management systems?
- Q2: Are stakeholder requirements a significant need conditioning as to an organization following standardized management systems?

The above questions were the basis for conducting a multi-faced analysis. The results obtained were to confirm whether stakeholders have a conscious impact on the improvement of quality in organizations (Q1) or whether only their requirements have an influence on organizations implementing effective management systems (Q2).

The multi-faced and multi-dimensional nature of this issue allowed for the identification of the covered research areas and to acquire full knowledge from the survey conducted in years 2011-2014. The first survey was done in January-April 2011 and the second in November 2013-April 2014.

In the course of the surveys, 600 organizations were interviewed in the first and 1107 in the second. The survey was carried out:

- in all SMEs (small and medium enterprises) classified entities,
- in 19 types of conducted business activity in accordance to the sector of economic activity, and,
- in all entities with standardized management systems (based on the acquired responses

   11 managements systems were identified, including 6 independent: ISO 9001,
   ISO 14001, PN-N 18001, ISO 27001, ISO 22000, HACCP as well as 5 integrated:
   ISO 9001 with ISO 14001, ISO 9001 with ISO 22000, ISO 9001 with PN-N 18001,
   ISO 9001 with ISO 14001, PN-N 18001 and ISO 9001 with ISO 27001).

In order to examine the dependence of stakeholder impact on quality improvement, e.g. by the need to implement management systems, unit logit probability models for B1 and B2 studies were identified.

#### 4. Results and discussion

Detailed analysis of the literature has shown the connection between a stakeholder and the quality. It is therefore important to establish whether the effectiveness and efficiency of the relationship stemmed from the major factors determining each of the party. In the case of the *external stakeholder's* correlation with *quality*, the requirements and expectations of the product, as well as the effects of the undertaken actions by an organization that made efforts to meet these demands, were identified. Research showed that the respondents from groups B1 and B2 constituted a group of entities aware of the impact they have on the quality development process in organizations (Figure 3).

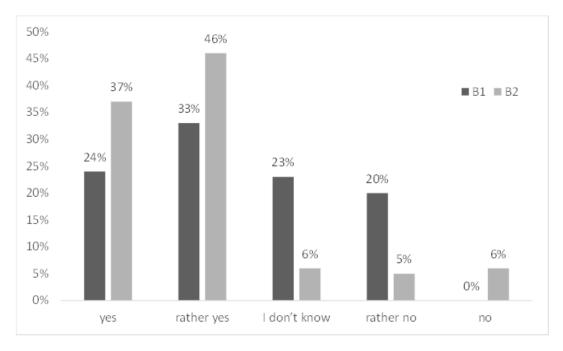


Figure 3. Use of strategic research in quality development. Source: own study.

In this case, the quality effect is perceived through the prism of development (modernization, innovation, improvement – upgrade, replenishment) of a product, service, method of provision, often resulting in the enhanced loyalty of stakeholders. The implementation of these changes is dependent on the achieved level of consumption, and thus, of the share in the market, which reduces costs of research and modernization of organization's resources.

For the purpose of achieving success within the *external stakeholder and quality* interaction, it is possible to: increase the amount of pro-consumer research (with focus on interviews and observations), introduce loyalty programs, reduce production costs by the implementation of standards and by minimizing or eliminating defective products and complaints (*zero defects policy*), improve by transferring activities and sales through the use of outsourcing or to undertake actions that internationalize an organization, e.g. new outlets, new manufacturing plants, new strategic alliances, mergers and acquisitions. The creation of such comprehensive solutions for the external stakeholder would generate positive effects on the internal one.

This means that the relationship between the internal stakeholder and quality would be based on the aspects of production, in particular, on the features and capabilities of human resources, with the appropriately stable level of parameterization being an influential factor. It should be noted that standardization, as a quality tool constituting the organization of work, will not be effective in cases of a dysfunctional work environment, reluctance, lack of commitment and motivation, misunderstanding of the idea or objectives of the undertaken actions, even if workers have appropriate knowledge, experience or skills.

The lack of activities, which take account various social, cultural or civilizational factors, may result in the creation of a poor organizational culture that affects organizational processes, work and effects of the work. Model B1 has been identified as a means of assessing the

relationship between the need to implement management systems (as a parameterization tool) and the requirements reported by stakeholders. The detailed model holds the following parameters:

<b>Coefficients</b> $\beta_{0}$ = -0.45846674	Matching measures	<b>Predictive power</b> PAC
$\begin{array}{rrr} \beta_{1} = & -0.8467673 \\ \beta_{2} = & 0.191990855 \\ \beta_{3} = & -0.04657892 \end{array}$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	60.76% credit R <sup>2</sup> 50.00% sensitivity 64.25% specificity Test $\chi^2$ : $\chi^2_{kr}$ = 15.047040 $\chi^2_{\alpha}$ = 7.814728
	AIC= 1.098065 BIC= 1.133181	

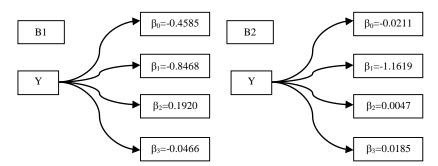
If for the model unit the  $X_1$  variable takes the external value, and  $X_2$  variable takes the *systemic approach to management* and  $X_3$  variable takes *the average value*, than the probability of a positive assessment has a rate of 40.33%. When the status of the  $X_1$  variable was changed to internal values and other variables stayed the same, than the probability dropped by 17.86% to 22.47%. In the worst combination of the response:  $X_1$  – *internal value*,  $X_2$  – *intervention of top management* and  $X_3$  – *very high value*, the probability of a positive assessment reached a level of 10.04%.

As a result of the obtained values in the model it can be stated that *customers' requirements* are an important need that conditions an organization's implementation of standardized management systems.

In the second study (B2), a statistically significant individual model was generated. This further confirmed the above statement. The model was described by the following parameters:

$\begin{array}{c} \textbf{Coefficients} \\ \beta_{0} = & -0.45846674 \end{array}$	Matching measures	<b>Predictive power</b> PAC
$\begin{array}{rcl} \beta_1 = & -0.8467673 \\ \beta_2 = & 0.191990855 \\ \beta_3 = & -0.04657892 \end{array}$	$R^{2}_{L} = 2.85\%$ $R^{2}_{CS} = 3.12\%$ $[max]R^{2}_{CS} = 67.14\%$ $R^{2}_{N} = 4.65\%$ $R^{2}_{VZ} = 5.84\%$ $R^{2}_{CU} = 4.65\%$	60.76% credit R <sup>2</sup> 50.00% sensitivity 64.25% specificity Test $\chi^2$ : $\chi^2_{kr}$ = 15.047040 $\chi^2_{\alpha}$ = 7.814728
	AIC= 1.098065 BIC= 1.133181	

The unit model in the B2 study of independent variables with the following values:  $X_1 - external$ ,  $X_2 - systemic$  approach to management,  $X_3 - small$  value, generated a possibility of a positive assessment of 25.60%. However, when the  $X_1$  value changed to internal, the probability dropped to 9.72%. In the worst assessed combination:  $X_1 - internal$ ,  $X_2 - continuous$  improvement and  $X_3 - no$  competition, the probability of a positive assessment reached 8.93%.



**Figure 4.** Recipient' requirements model conditioning the possession of integrated quality management systems in B1 and B2 organizations. Source: own research based on studies.

The final model generated in the B2 study, dependent on one  $X_1$  variable, which takes the external state, creates a possibility to assess success at 24,57%. However, when the state changes to internal, the probability reaches the value of 9.17%. The achieved parameters describing the model allowed to state that *there is a need postulated by stakeholders to have standardized management systems in organizations*.

The results confirmed the correlation between a stakeholder and quality. This can be observed in everyday life, because it is the human factor that has a direct impact on the produced quality in an organization, which is later supplied to external entities.

Standardization should be used to increase efficiency and effectiveness at the workplace, by clearly defining the codes of conduct with parameterization, while transferring power and responsibility. This approach significantly affects the improvement of quality in process management and increases quality in the functioning of an organization.

It should also be made clear that the relationship between an internal and external stakeholder can concern both the material (product-related) and non-material (understanding, confidence, trust, information about a product and organization) aspects. These factors might significantly affect the image of an organization, as well as the employees themselves, which will have consequences in the creation of demand and loyalty.

### 5. Summary

In conclusion, interactions created in the relationship between the quality and the internal/external stakeholder determine improvement of an organization (perceived as a process). This results in, inter alia, the need to continuously monitor and improve the processes, as well as to assess the level of parameterization through the implementation of the management system, which confirms Q1 and Q2.

This shows that organizations consider the role of stakeholders as an important determinant of quality, forcing entrepreneurs to enact pro-quality measures, thus increasing the company's effectiveness, efficiency and competitiveness. It also guarantees the achievement of an appropriate level of quality. Such activities also apply to limiting the impact the internal and external conditions have on the effectiveness of the organizational process.

# References

- 1. Dąbrowski, T. (2010). The reputation of a company. Kraków: Wolters Kluwer Polska.
- 2. Freeman, R.E., Harrison, J.S., Wicks, A.C. (2007). *Managing for stakeholders. Survival, reputation and success.* New Haven-London: Pub. Yale University Press.
- 3. Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Marshfield: Pitman Publishing Inc.
- 4. Garoui, N., and Jarboui, A. (2012). Stakeholder theory, corporate governance, and cognitive mapping techniques, *International Refereed Research Journal*, *III*, *2*(2), 50-61.
- 5. Hamrol, A. (2008). Zarządzanie jakością z przykładami. Warszawa: PWN.
- Isopeskul, O., Shakina, M., and Georgieva, N. (2016.04.13). *Influence of Stakeholders on* Organizational Culture Development. 4th International Conference on Management, *Leadership and Governance*, Universiti of Economics Saint-Perersburg, Russia.
- 7. Kostera, M., and Śliwa, M. (2012). *Zarządzanie w XXI wieku: Jakość, twórczość, kultura*. Warszawa: Wolters Kluwer Business.
- 8. Łudzińska, K. (2013). Polish companies CEOs' opinion of stakeholders. *The Quarterly Journal of Economics*, 2, 41-49.
- 9. Nita, B. (2016). Theory of Stakeholders and the reporting information based on the achievements prism. *Theoretical Accounting Books*, 87(143), 117-128.
- 10. Oaks, T., Freeman, R.E., Harrison, J.S., and Wicks A.C. (2007). *Managing for stakeholders*. *Survival, reputation and success.* New Haven-London: Pub. Yale University Press.

- 11. Olkiewicz, M. (2018). Quality improvement through foresight methodology as a direction to increase the effectiveness of an organization. *Contemporary Economics*, *12(1)*, 69-80. doi:10.5709/ce.1897-9254.264.
- 12. Olkiewicz, M., and Wolniak, R. (2018). The impact of natural environment on food safety. *Rocznik Ochrona Środowiska, 20,* 804-818.
- 13. Olkiewicz, M., Bober, B., and Wolniak, R. (2017). Innowacje w przemyśle farmaceutycznym jako determinanta procesu kształtowania jakości życia. *Przemysł chemiczny*, *96*(*11*), 2199-2201, doi: 10.15199/62.2017.9.2.
- 14. Olkiewicz, M., Wolniak, R., Eva-Grebski, M., and Olkiewicz, A. (2019). A Comparative Analysis of the Impact of the Business Incubator Center on the Economic Sustainable Development of the Region in USA and Poland, *Sustainability*, 11(1), 173, doi:org/10.3390/su11010173.
- 15. Paliwoda-Matiolańska, A. (2009). *Social responsibility in company management process*. Warsaw: C.H. Beck.
- 16. Paliwoda-Matiolańska, A. (2009a). Corporate social responsibility in the company management process. Warsaw: C.H. Beck.
- 17. PN-EN ISO 26000:2009 Zarządzanie odpowiedzialnością społeczną (2009). Warszawa: Wyd. Polski Komitet Normalizacyjny.
- 18. PN-EN ISO 31000:2012 Zarządzanie ryzykiem Zasady i wytyczne (2012) Warszawa: Wyd. Polski Komitet Normalizacyjny.
- 19. *PN-EN ISO 9000:2006 Systemy zarządzania jakością. Podstawy i terminologia* (2006). Warszawa: Wyd. Polski Komitet Normalizacyjny.
- 20. PN-EN ISO 9004:2018 Zarządzanie jakością Jakość organizacji Wytyczne osiągnięcia trwałego sukcesu (2018). Warszawa: Wyd. Polski Komitet Normalizacyjny.
- 21. PN-ISO 10014:2008 Zarządzanie jakością Wytyczne do osiągania korzyści finansowych i ekonomicznych (2008). Warszawa: Wyd. Polski Komitet Normalizacyjny.
- 22. The EFQM Excellence Model (2007). The European Foundation for Quality Management.
- 23. Werther, W.B., and Chandler, D. (2011). *Strategic corporate social responsibility: Stakeholders in a global environment.* California: Pub. Sage.
- 24. Westrenius, A., and Barnes, L. (2015). Managing complex business relationships: small business and stakeholder salience. *The Journal of Developing Areas*, *6*(49), 1116-1125, doi: 10.1353/jda.2015.0104.
- 25. Wolniak, R. (2018). *Quality management systems according to ISO 9001:2015 requirements and its improvements.* Gliwice: Wydawnictwo Politechniki Śląskiej.