

Michał Molenda
ORCID ID: 0000-0002-0276-742X
Silesian University of Technology, **Poland**



INCRODUCTION

Quality determines the success of an enterprise and its place in the market. It affects the way a company is perceived by its competitors. Quality is the basic foundation of economic efficiency and stability of the processes implemented by an organization. Quality of products and processes determines the future of the enterprise. For many years, managers have been supported by the ISO 9000 standards containing, among others, a “recipe” for effective quality management. In particular, the ISO 9001 standard includes requirements with regard to the design and implementation of quality management systems. This system requires from enterprises a specific activity in terms of supervisory activities in many areas. Starting from the unambiguous identification of customer requirements, through implementation processes, to examining customer satisfaction. Order, stability, predictability, bureaucracy, formalization are the terms characteristic of quality management systems based on the ISO 9001 standard. These phenomena minimize the risk in the area of quality, so it is possible to avoid incompatibilities in products and processes. Given the wide group of recipients of this standard, thanks to a high adaptability to organizations, industries and business profiles, the nature of their requirements may mean phenomena that are difficult to accept for certain organizations. In particular, organizations whose organizational cultures are geared towards flexibility, change and avoidance of formalization.

The article contains the results of studies on five selected quality policy aspects regarding the orientation towards improvement (TQM). Details of the study process have been included in chapter “ Process of studying the quality policy and organizational culture”.

The basic research problem the solution for which was presented in this article, are the following questions.

- What is the actually implemented quality policy in the improvement area in the studied industrial enterprises?

- Are there differences in the level of orientation towards improvement (TQM) in the groups of enterprises with various types of organizational culture?

ESSENCE OF THE QUALITY POLICY AND ORGANIZATIONAL CULTURE

The quality policy is a characteristic element of quality management systems based on the ISO 9000 standards (Mourougan S., Sethuraman K. 2017). It takes the form of the management's declaration which usually contains a description of a manner to approach the issue of quality of products and processes (Molenda M. 2020, 2019, 2015). The quality policy, where it is reliably and effectively implemented, strongly affects many aspects of the functioning of the organization. It should affect the process structure of the enterprise, the methods used as well as formal and informal organizational practices. These above-mentioned formal practices often take the form of quality management system documentation. The documentation (e.g. documented information in the form of procedures) should be treated as a concept of the manner to implement the quality policy. The implemented quality management system should be a basis for an actual manner of quality management in an organization. The managerial approaches, especially the decision-making criteria, should be consistent with the quality policy announced in the organization. The approaches of the management determine the way how the staff thinks, behaves and what are its practices, as a result of which the employees approach the issue of quality in line with the actual expectations of the managers. As a consequence, the quality policy, on the one hand, shapes the organizational culture in the long-term and, on the other hand, is determined by this culture. The quality policy may not be accepted by the organization due to the strong resistance resulting from the fact that the staff does not accept the new way of thinking of the management with regard to quality. It is not difficult to imagine this situation, as the organizational culture is a catalyst for change in the organization. Because the organizational culture is, in its simplest interpretation, the system of values, behaviors, artifacts supporting the progress of organizations shared by the organizational community (Schein, E.H. 1997). For many years, the issue of organizational culture as a determinant of the success of the organization has been the subject of research carried out in industrial and service enterprises (Dohn K. Łyp K. 2017), public administration, IT industry (Ober J.P. 2020) and education (Jonek-Kowalska I. Krannich M. 2013). In addition, the organizational culture is a context for studying various phenomena and processes in organizations, such as change (Kowalska-Styczeń A. and Owczarek T. 2017), innovation (Silva G., Gomes P., Lages L., Pereira Z. 2014), improvement (Sułkowski, M., Wolniak, R. 2016; Wolniak R., 2012), business successes and failures (Hetland, H., Sandal, G. and Backer, J. 2007).

The ambiguity and broad interpretation of the concept of organizational culture make its examination a very subjective process. The results depend mainly on the criteria adopted. Researchers of organizational culture try to simplify the way of its understanding in order to use it for practical applications. As a result, many

models have been created thanks to which the specific types of organizational cultures have been identified. One of such methods is the Cameron-Quinn model. This model is one of the classic and comprehensive methods used to study the organizational culture. The study is carried out using a survey form containing a set of 24 statements characteristic for the type of organizational culture. Respondents are asked to indicate the degree of similarity between the statement and the situation in the given organization. This model classifies the types of culture according to the orientation of the company towards the 4 so-called competing values. The model of typology of cultures together with characteristics of these organizations has been presented in Fig. 1.

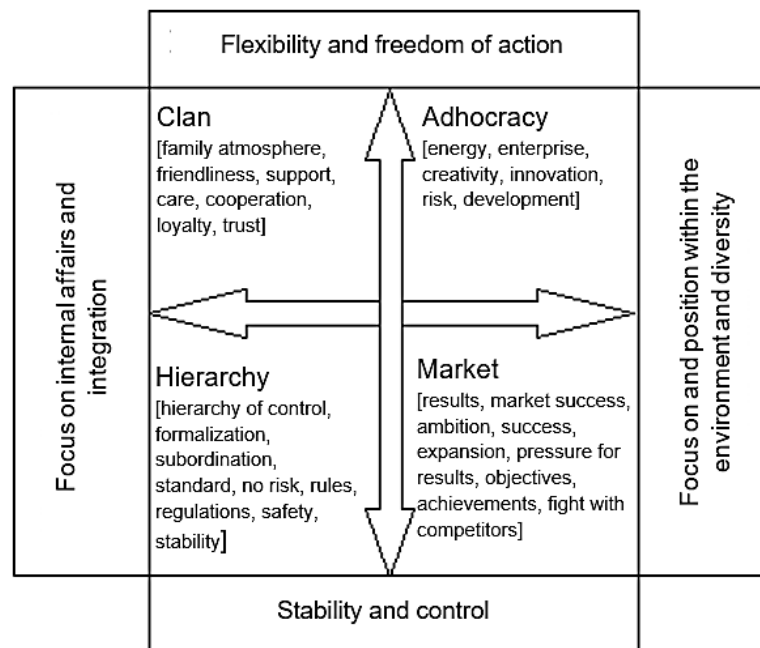


Fig. 1 Model of competing values

Source: K. Cameron and R. Quinn; *Organizational culture – diagnosis and change*; Oficyna Ekonomiczna; Kraków; 2003

PROCESS OF STUDYING THE QUALITY POLICY AND ORGANIZATIONAL CULTURE

The research results presented in this article are based on survey questionnaire carried out among supervision employees and middle management. The research was carried out in the years 2015-2019 among 166 industrial entrepreneurs functioning in Poland. The survey sheet describes, among others, 35 aspects (behaviors) characteristic of the organization strongly oriented towards quality and TQM philosophy (Sharma P., Jain N., Pruthi K. 2013; Chen, C.K., Lee, J.D., Dahlgard, J.J. 2016).

The respondents answered to what extent the behavior described in the survey is characteristic for their organization. The described aspects were assessed by the respondents on a scale from 1 to 5. The adopted scale reflects the level of similarity of the state described in the survey to the situation in a given organization.

This paper presents the results of studies concerning 5 quality policy aspects that illustrate the actual focus of the studied enterprises on quality in the area of improvement. They include:

- #A1 – the extent to which the HR policy is about the constant development of employee’s qualifications,
- #A2 – the extent to which the employees are rewarded for their work and engagement in attaining the right quality of products,
- #A3 – the extent to which the employees are supported by management in the implementation of their obligations,
- #A4 – the extent to which the employees can improve their qualifications,
- #A5 – the extent to which the employees are motivated to carry out their duties.

In the survey sheet, in addition to the aspects used for studying the quality policy, respondents were asked to complete the part used for identifying the organizational culture. This identification was carried out in accordance with the Cameron-Quinn model.

Results of studies – level of focus on improvement (TQM) and organizational culture

In the studied group of 166 industrial enterprises, 40 of them represented the Clan culture, 19 the Adhocracy culture, 52 were the group of enterprises with the Market culture and 55 were assigned to the group with Hierarchy characteristics. Table 1, in addition to the number of enterprises, contains the arithmetic mean values of 5 assessments of the quality policy aspects for all enterprises from the given group of culture (X_m) and their standard deviation (d).

Table 1 Structure of the group of enterprises and the level of orientation towards TQM

Type of organizational structure	Number of enterprises [n]	Level of orientation towards TQM [X_m]	Standard deviation [d]
Clan	40	3.71	0.76
Adhocracy	19	3.90	0.53
Market	52	2.65	0.80
Hierarchy	55	2.93	0.90
	Total: 166	Average: 3.14	

Fig. 2 contains a chart illustrating a comparison of mean values for each group of culture. Studies show that enterprises with the Adhocracy culture have the strongest focus on TQM and improvement (3.9 on a scale of 1-5). Despite its smallest size, this is the most homogeneous group, as the standard deviation from the mean value for these enterprises is (0.53). Studies show that enterprises with the Clan culture are also strongly focused on TQM (3.71). The least focused on improvement are enterprises with the Market culture (2.65) and Hierarchy culture (2.93).

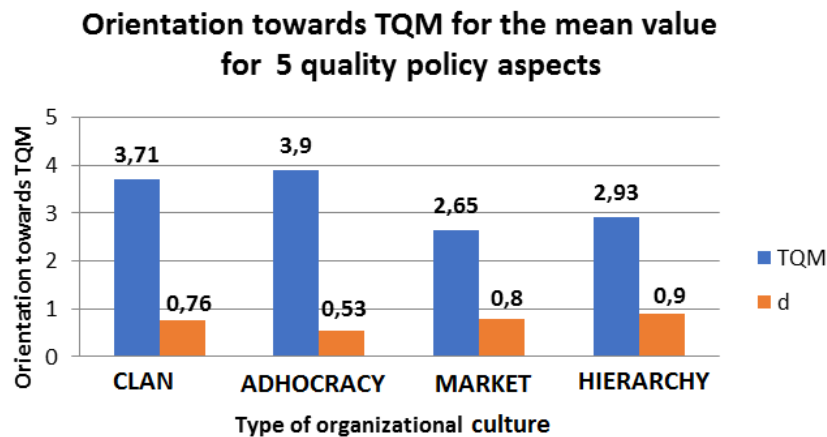


Fig. 2 Orientation towards TQM for the mean value for 5 quality policy aspects

Source: own work

Enterprises with the Clan culture achieve the best results in terms of aspect #A3. The mean value for this aspect is 4.0, indicating a high level of support of the employees by management in the implementation of their obligations. Slightly lower values were achieved by aspect 4 (3.85), i.e. the extent to which the employees can improve their qualifications. Aspects #A1 and #A5 achieved the worst values in this group. Fig. 3 shows the results of studies for enterprises with the Clan culture.

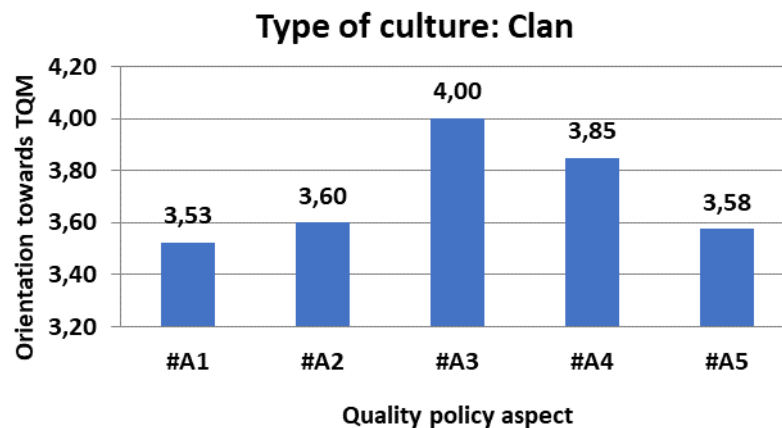


Fig. 3 Comparison of each quality policy aspect for enterprises with the Clan culture

Source: own work

Just like with the Clan culture, enterprises with the Adhocracy culture achieve the best results in terms of aspect #A3. The mean value for this aspect is 4.16, indicating a high level of support of the employees by management in the implementation of their obligations. Slightly lower values were achieved by aspect #A4 (4.0), i.e. the extent to which the employees can improve their qualifications. In this group of enterprises, the lowest values were achieved by aspect #A5 - the extent to which the employees are motivated to carry out their duties. Fig. 4 shows the results of studies for enterprises with the Adhocracy culture.

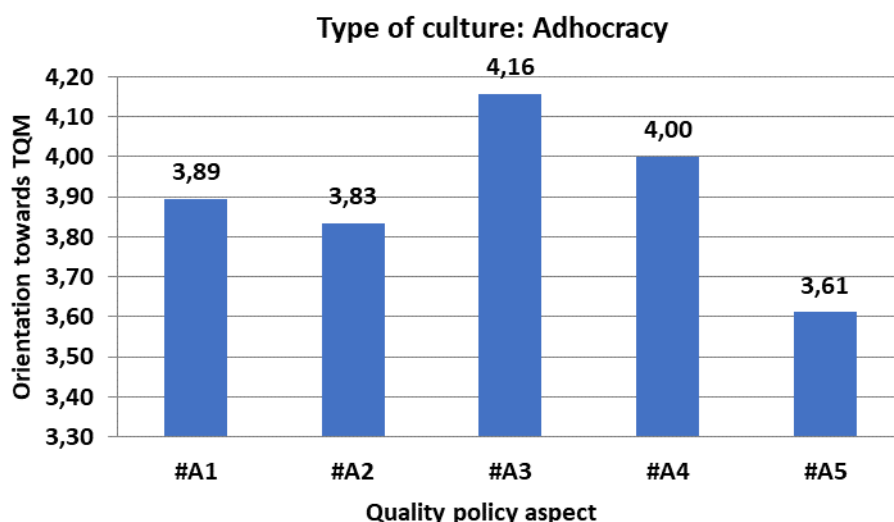


Fig. 4 Comparison of each quality policy aspect for enterprises with the Adhocracy culture

Source: own work

Enterprises with the Market culture generally achieved the worst results when it comes to orientation towards TQM. In this group, the best results were achieved in aspect #A1. The mean value is 2.9, which indicates their level of support for employees from the management in carrying out their duties as the strongest part of this culture when compared to other aspects. Slightly lower values were achieved by aspect #A3 (2.86) i.e. extent to which the employees are supported by management in the implementation of their obligations.

In this group of enterprises, the lowest values were achieved by aspects #A2 – the extent to which the employees are rewarded for their work and engagement in attaining the right quality of products (2.46) and #A5 – the extent to which the employees are motivated to carry out their duties (2.42). Fig. 5 shows the results of studies for enterprises with the Market culture.

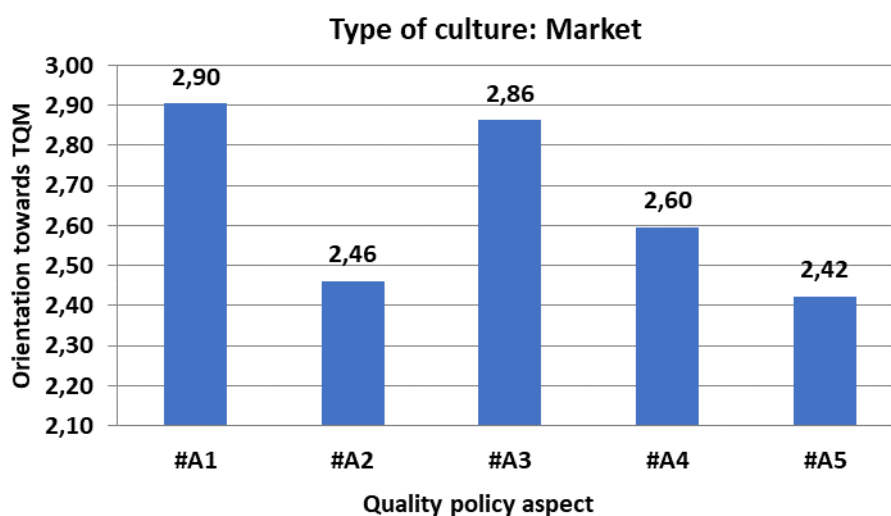


Fig. 5 Comparison of each quality policy aspect for enterprises with the Market culture

Source: own work

Enterprises with the Hierarchy culture generally performed slightly better than those with the Market culture with regard to orientation towards TQM. In this group, the best results were achieved in aspect #A4 (3.13) and #A3 (3.11). The extent to which the employees can improve their qualifications and the extent to which the employees are supported by management in the implementation of their obligations are the aspects which are best rated in this group of enterprises. The group of enterprises with the Hierarchy culture is similar to the Market culture in terms of the worst rated aspects. In this group of enterprises, the lowest values were achieved by aspects #A2 – the extent to which the employees are rewarded for their work and engagement in attaining the right quality of products (2.73) and #A5 – the extent to which the employees are motivated to carry out their duties (2.76). Fig. 6 shows the results of studies for enterprises with the Hierarchy culture.

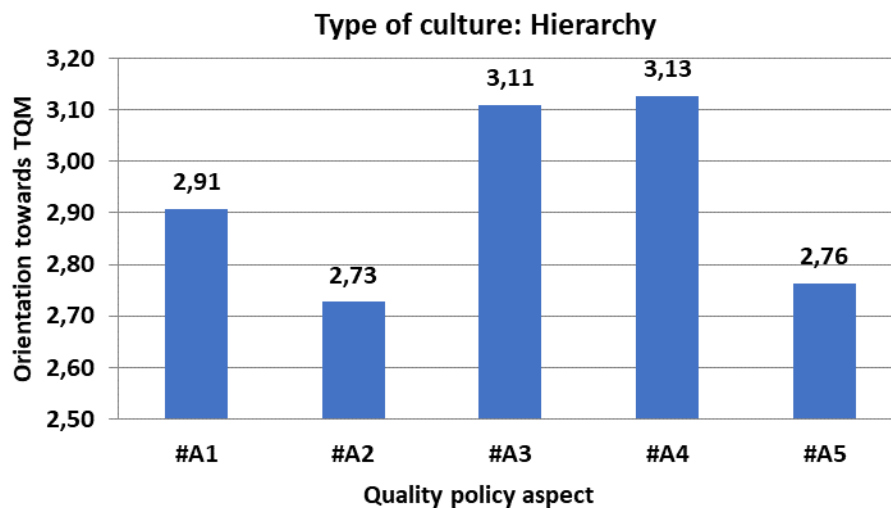


Fig. 6 Comparison of each quality policy aspect for enterprises with the Hierarchy culture

Source: own work

Collective comparison for all groups of cultures and all aspects has been contained in Table 2 and Fig.7.

Table 2 Collective comparison of results

Type of culture	Quality policy aspect				
	# A1	# A2	# A3	# A4	# A5
Clan	3.53	3.60	4.00	3.85	3.58
Adhocracy	3.89	3.83	4.16	4.00	3.61
Market	2.90	2.46	2.86	2.60	2.42
Hierarchy	2.91	2.73	3.11	3.13	2.76

Source: Own study

A comparison of all 5 aspects reveals differences in the implementation of the quality policy in enterprises with various types of organizational cultures. Enterprises focused on flexibility and freedom of action (Clan and Adhocracy)

have the quality policies which are much more focused on TQM and improvement. The most quality-oriented policy is observed among enterprises with the Adhocracy culture focused on the position within the environment and diversity. The quality policy focused on TQM is therefore supported by characteristics such as, among others: creativity, innovation, risk-taking. Innovation and friendliness, support, care, cooperation, loyalty, trust.

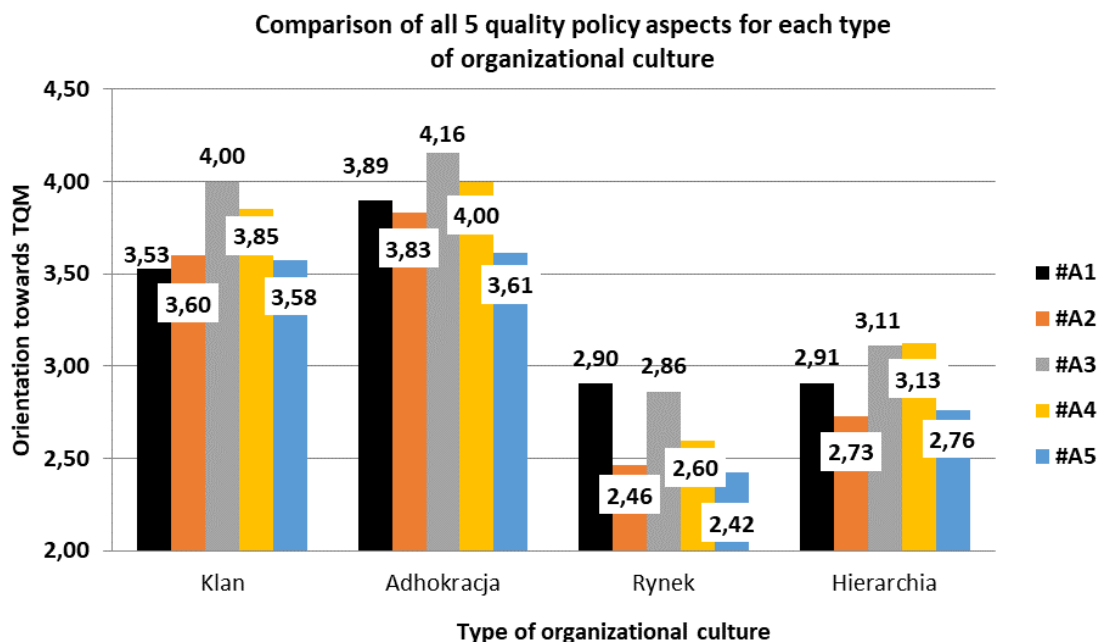


Fig. 7 Assessment of the selected quality policy aspects in each group of culture

Source: Own study

CONCLUSIONS

The results of studies conducted among 166 industrial enterprises prove that the implemented quality policy and, in principle, the strength of orientation towards improvement (TQM), differs in groups with various organizational cultures. The most quality-oriented policy is implemented by enterprises focused mainly on flexibility and freedom of action, which include the Clan and Adhocracy cultures. It turns out that the orientation towards improvement among enterprises focused on stability and control (Market, Hierarchy) is less characteristic. Characteristics and phenomena such as control, formalization, standard, no risk, rules, limit orientation towards improvement. The results of studies on these quality policy aspects are not surprising. Nevertheless, the results of the analysis of other studied quality policy aspects may be interesting. In view of the fact that, as it has already been mentioned, quality management and, in particular, the quality management system needs to be formalized and stabilized. Organizations representing the Clan and Adhocracy culture may not show support in these quality policy aspects.

REFERENCES

- Ober J.P. (2020), Innovation adoption: empirical analysis on the example of selected factors of organizational culture in the IT industry in Poland; *Sustainability*; vol. 12 issue 20 pp. 1-25
- Dohn K., Łyp K., (2017) Analiza wpływu kultury organizacyjnej na postawę społeczno-zawodową personelu medycznego; *Zesz. Nauk. Pol. Śl., Org. Zarz.*; z. 101 pp. 97-110
- Kowalska-Styczeń A., Owczarek T., (2017); Creating organizational culture under the influence of leadership and training - a CA approach; *Vision 2020: Sustainable Economic development, Innovation Management, and Global Growth. Proceedings of the 30th International Business Information Management Association Conference (IBIMA), 8-9 November 2017, Madrid, Spain. International Business Information Management Association, 2017*
- Jonek-Kowalska I., Krannich M. (2013); Kultura organizacyjna uczelni wyższych, jako element kształtowania strategii rozwoju; *Nowoczesność przemysłu i usług w warunkach kryzysu i nowych wyzwań. Praca zbiorowa. Pod red. J. Brzóska, J. Pyki; Towarzystwo Naukowe Organizacji i Kierownictwa. Katowice*
- Hetland, H., Sandal, G. and Backer, J. (2007), Burnout in the Information Technology Sector: Does Leadership Matter?, *European Journal of Work and Organizational Psychology*, 16:1, pp. 58-75.
- Schein, E.H. (1997). *Organizational Culture and Leadership* (2. Ed.), Jossey-Bass, San Francisco.
- Cameron K., Quinn R. (2003) *Kultura organizacyjna – diagnoza i zmiana*; Oficyna Ekonomiczna; Kraków.
- Chen, C.K., Lee, J.D., Dahlgard, J.J. (2016). A stepwise ISO-based TQM implementation approach using ISO 9001:2015. *Management and Production Engineering Review*, 4, pp. 65-75.
- Molenda M. (2020), Assessment of quality policy in the social and cultural area of selected industrial enterprises [in:] *Multidisciplinary aspects of production engineering. Monograph. Social Sciences. Pt. 2. Ed. Katarzyna Midor, Warszawa, Sciendo*, pp. 527-536,
- Molenda M., (2019) Assessment of chosen aspects of Quality Policy in selected industrial enterprises, *Scientific papers of Silesian University of Technology Organization and Management Series no.136*
- Molenda, M., (2015). Quality policy in the intelligent quality management system. *Management Systems in Production Engineering*. 2015, 5 issue 4, pp. 219-224,
- Mourougan S., Sethuraman K. (2017). Understanding and Implementing Quality Management System. *IOSR Journal of Business and Management*, Vol. 19, 2017, pp. 41-51.
- Sharma P., Jain N., Pruthi K.(2013). TQM: Implementation, Scope and Myths – A Review. *Research Journal of Engineering Sciences*, Vol. 2(6), pp. 40-44.
- Silva G., Gomes P., Lages L., Pereira Z (2014). The role of TQM in strategic product innovation: an empirical assessment. *International Journal of Operations & Production*, vol. 34, issue 10, 2014, pp. 1307-1337.
- Sułkowski, M., Wolniak, R. (2016). Przegląd stosowanych metod oceny skuteczności i efektywności organizacji zorientowanych na ciągłe doskonalenie. *Zeszyty Naukowe Politechniki Śląskiej. Seria Organizacja i Zarządzanie*, 67, pp. 63-74.
- Wolniak R., (2012) *Wymiary kulturowe polskich organizacji a doskonalenie zarządzania jakością. CeDeWu Sp. z o. o., Warszawa.*

Abstract: The article is one of a series of articles (Molenda, 2020) in which the results of studies on the assessment of the quality policy in industrial enterprises operating in Poland have been described. When carrying out the surveys in the years 2015-2019, in addition to the quality policy, the type of organizational culture of enterprises was identified, among other things. This allowed to divide enterprises into 4 groups, depending on the dominant type of organizational culture identified according to the Cameron-Quinn methodology (Cameron K., Quinn R. 2003). This study compares the quality policies of these enterprises in terms of their orientation towards improvement characteristic of the TQM philosophy. The first part of the article describes the issue of the quality policy in the context of organizational culture. The body of the article contains the results of studies conducted among 166 enterprises. A preliminary statistical analysis of the results allowed to answer the question of what is the level of orientation of the implemented quality policy towards improvement and whether this level varies depending on the organizational culture.

Keywords: quality, quality policy, quality culture, QMS, TQM