

COMPARISON OF THE SUPPLY QUALITY POLICY IN SELECTED INDUSTRIAL ENTERPRISES

Michał MOLENDĄ

Silesian University of Technology, Faculty of Organization and Management, Institute of Economics and Informatics; michal.molenda@polsl.pl; ORCID: 0000-0002-0276-742X

Purpose: The objective of this article is to present the results of research concerning the assessment of the actually implemented Quality Policy (QP) in supply area of selected industrial enterprises. The objective of the research was a multi-faceted assessment and analysis of implemented quality policies.

Design/methodology/approach: The deliberations are based on the related subject literature and an analysis of the long-term survey results. The detailed research methodology is described in section 2. of this article.

Findings: Based on the results of the research carried out in the surveyed group of 166 companies, it was found that medium and large enterprises are most firmly focused on ensuring the quality of supplies through cooperation with proven suppliers.

The quality policy of the largest enterprises is also most strongly focused on caring for relations with suppliers. Enterprises from the small group take better care of the relationships with suppliers. The research results prove that large enterprises implement a quality policy more strongly focused on the supply quality.

Originality/value: Knowledge of quality management issues has been increased. The article raises the issue of implementing quality policies in companies. The quality policy was characterized by selected QP aspects that illustrate the actual focus of the surveyed enterprises on the quality of supply. An evaluation of these aspects in selected enterprises was carried out, and differences dividing quality policies among independent and dependent enterprises in the implementation and supervision of quality standards were identified.

Keywords: quality policy, quality management, quality management system, improvement, Total Quality Management.

Category of the paper: Research paper.

1. Introduction

The dynamic development of technology, competition pressure, the need to minimize the negative impact on the environment and the continuous increase in customer requirements and maintaining social responsibility (Hąbek, 2017) are just a few of the challenges faced by today's managers. To stay on the market, such a business context means that every company needs an adequately defined strategy and policy and their implementation through an effective management system that will be the basis for development and operational improvement (Sułkowski, Wolniak, 2016).

One of the key elements influencing the success of an organization is the policy of enterprises in the area of quality, i.e., meeting the requirements, both set by customers and resulting from applicable legal and normative regulations. As a consequence, a properly adopted and implemented quality policy is extremely important, which is defined by managers as part of the frequently implemented quality management system in accordance with the ISO 9001 standard (Midor, 2013; Mourougan, Sethuraman, 2017; Pacana, Ulewicz, 2020; Bugdol, Hajduga, 2023; Ligarski, 2020).

One of the areas of the company's operation defined under the quality policy is the area of supply quality as a key determinant of the quality of products and services. Without an appropriate policy that will be the basis for the assessment, selection and quality of relations and cooperation with suppliers, it is not possible to guarantee, let alone improve, the quality of products and services.

The article contains the results of a survey conducted among 166 industrial enterprises operating in Poland. The objective of the research was a multi-faceted assessment and analysis of implemented quality policies. The results provided in this article refer only to two selected aspects of quality policy that relate to procurement. Statistical analysis of the research results made it possible to assess the level of focus on quality in terms of selection and relations with suppliers and to compare the results in groups of enterprises with different employment levels and varying degrees of independence in setting internal quality standards.

The basic research problem whose solution is presented in this paper, are the following research questions:

- what is the quality policy actually implemented in the area of supplier quality management in the surveyed industrial enterprises?
- do differences exist in the implemented quality policy in groups of enterprises classified depending on their size and the so-called degree of independence in setting policy?

2. Research process description and methodology

Studying the quality policy in an organization is a major challenge. As mentioned earlier, declarations contained in QP text often do not have a lot in common with the actual goodwill of the organization. Therefore, to get to know the real quality policy concerning suppliers, it was necessary to conduct an anonymous survey.

The quality policy survey sheet described 35. aspects (behaviors) characteristic of a strongly quality-oriented organization, close to the TQM philosophy. The results provided in this article refer to two selected QP aspects that illustrate the actual focus of the surveyed enterprises on the quality of supply. They include: Aspect #A1 – The organization cooperates with proven suppliers and Aspect #A2 – The organization takes care of relations with suppliers.

Respondents indicated how the behavior described in the survey is characteristic of the organization where they work. The described aspects were rated by respondents on a scale of 1 to 5. The scale adopted reflects the strength of the similarity of the behavior described in the survey to the situation in each organization.

The results of the practical research described in this article are based on a survey of supervisory employees and middle managers, who represented the enterprise by filling out a single survey sheet (self-assessment sheet).. Data was entered into the sheet based on expert judgement. Expert judgment is a technique in management process that refers to making judgment based on skill, expertise, or specialized knowledge in a particular area.

The surveyed group of companies (166) was not a research sample. When analyzing the survey results, no parameter estimation was made on the population of Polish enterprises.

Because opinions were anonymous, we were able to examine the real quality policy in a wide range and relatively reliably.

The survey was conducted in 2015-2019 among 166. enterprises operating in Poland. During the survey, independence in setting quality policy was identified for 164 enterprises. These were manufacturing enterprises from various industries. Enterprises were selected on the basis of proposals issued to conduct a survey.

3. Supply quality policy

Policy is generally a method of operation adopted by the decision-making center of a formalized social group, e.g., the management of an organization, aimed at achieving the set goals through specific means. The policy in the organization should be directly derived from the mission and strategy of the company. This policy is the basis for setting quality goals, building a process structure and setting internal quality standards. It should also determine the

actual manner of quality management, managerial practices and employee behavior. As a consequence, it should determine the perception of the company on the market and the ultimate business success.

According to the ISO 9001 standard, each organization should define, document and implement a quality policy. The ISO 9000 standard defines quality policy as “the totality of an organization’s intentions and orientation regarding quality as formally expressed by top management”. Notably, the standard does not define requirements for the essence of the policy. This is an autonomous decision of enterprise managers. Therefore, even ISO 9001-certified organizations define and maintain their own policies in line with their overall business strategy.

The quality policy is often considered in the literature as a key document of the quality management system containing the declaration of the top management regarding many aspects of activity, in particular regarding the seven principles of quality management (ISO 9000). Therefore, the policy contains declarations of the organization regarding such issues as the approach to customers, commitment to continuous improvement and approach to relations with suppliers. The quality policy in ISO 9001-certified enterprises is identified with a formal document through which the top management expresses its commitment to the functioning of the quality management system. In managerial practice, it is treated only as a document required by the ISO 9001 standard, having no impact on management processes and organizational behavior. This approach to quality policy marginalizes its significant role in building a culture of quality (Miller et al., 2014), i.e., an organization strongly focused on quality in accordance with the TQM philosophy (Calvo-Mora et al., 2014; Chen et al., 2016; Sharma et al., 2013; Silva et al., 2014).

Industrial enterprises operate in a cooperative system, a network of logistics connections, supplier-recipient relations that allow for building efficient and effective supply systems (Drljača, 2019; Hysa, 2004; Kot et al., 2020; Pałucha, 2016). It is normal that the quality of products supplied to the market is determined, among other things, by the quality of supply processes (Matusek, 2016). This dependence first entails the need to carefully select the supplier and then maintain lasting relationships based on trust. The requirements for the selection and assessment of suppliers are included in the ISO 9000 series standards. The standard requires enterprises to have a transparent process of selecting suppliers and cooperators (Midor, Biały, 2019). This process should be carried out on the basis of accepted methods, in particular, established decision-making criteria for the evaluation and selection of partners. These criteria should directly derive from the supply quality policy adopted by the top management, which should be based on the seventh principle of quality management. It reads that “in order to achieve lasting success, organizations manage their relationships with stakeholders such as suppliers”. As we can read from the justification of the principle, “significant stakeholders influence the performance of the organization”. Sustainable success is more likely to be achieved when an organization manages relationships with all stakeholders to optimize their impact on performance (ISO 9000).

The management of a company that wants to implement the aforementioned Principle 7 precisely defines, first of all, key suppliers. Areas of cooperation in the short and long term are established for these partners. In industrial enterprises, this cooperation is strategic. If we take the automotive industry as an example, key suppliers are treated almost as part of the organization. In the areas of key components, there is a need to carry out joint long-term research and development works, investment processes, and even extensive integration of IT systems, which is necessary for quick communication between partners. Therefore, such aspects of the quality policy in the area of supply as the selection and relationship with suppliers/cooperators, are critical.

4. Supply quality policy – research results

The obtained research results allow concluding that enterprises are significantly focused on ensuring the quality of suppliers and caring for relations with them. The average value of indications of all surveyed enterprises for aspect #A1 was 4.0 points, and for aspect #A2 – 3.79 points. Detailed statistical data on the results obtained are included in Table 1. The overall results of the research on each aspect of the policy are presented in Figure 1.

Table 1.

Descriptive statistics of research results for each aspect

Statistics	Aspect #A1	Aspect #A2
Count (N)	162	164
Mean	4,0	3,79
Standard Error	0,071	0,085
Standard Deviation	0,905	1,088
Confidence level (95,0%)	0,140	0,167

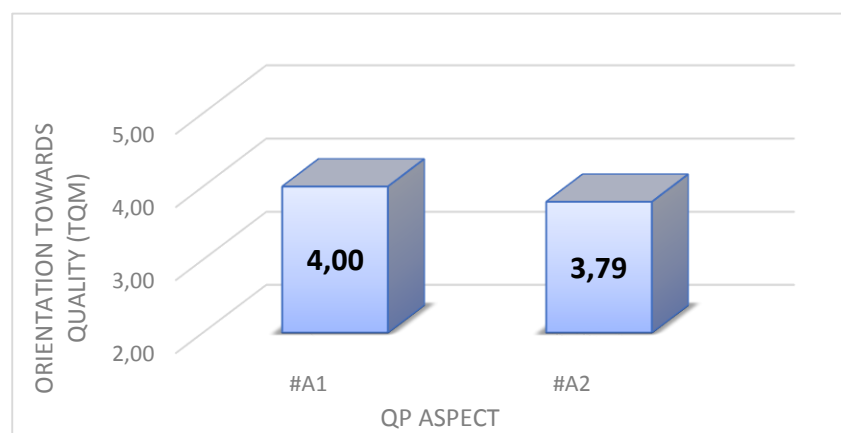


Figure 1. Comparison of the level of strength of orientation to quality in terms of the QP aspects under consideration.

Source: Own study.

The number of enterprises for which the policy in respect of aspect #A1 was identified was 162, while in respect of aspect #A2, it was 164. The number of enterprises that assessed the attitude towards cooperation with proven suppliers as very strong (5 points) is 58, which is 35% of all surveyed enterprises (162 enterprises). It was not much lower, as 54 enterprises assessed this attitude as strong and assigned it 4 points (33%). Among 42 companies, an average attitude (3 points) to cooperation with proven suppliers was noted. The rating of 2 points was given to only 8 enterprises. The lowest possible scores (1 point) were not recorded. The results prove that the quality policies of the surveyed enterprises in the field of cooperation with suppliers are diversified and the three largest groups stand out. Most of them are enterprises strongly or very strongly focused on cooperation with reliable suppliers. The results of the research on the approach to suppliers are presented in Figure 2.

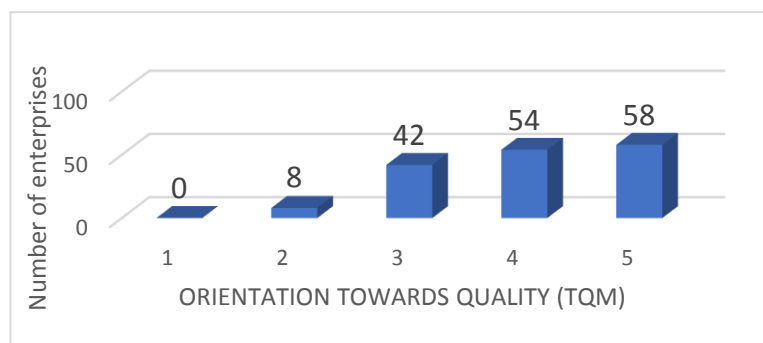


Figure 2. The structure of enterprises for the assessment of cooperation with proven suppliers only(#A1).

Source: Own study.

The results prove that the quality policy of the surveyed enterprises in terms of caring for relations with suppliers is also varied. The number of enterprises that rated caring for the relationship as very strong and assigned 5 points to is 44, which is 26% of all enterprises that responded in this regard (164 enterprises in total). The largest group of 71 enterprises assessed the level of caring for relations as good and assigned 4 points (43%). The score of 1 or 2 points was given to a total of 19 companies whose quality policy is not focused on caring for relationships. The results of the research in the discussed scope are presented in Figure 3.

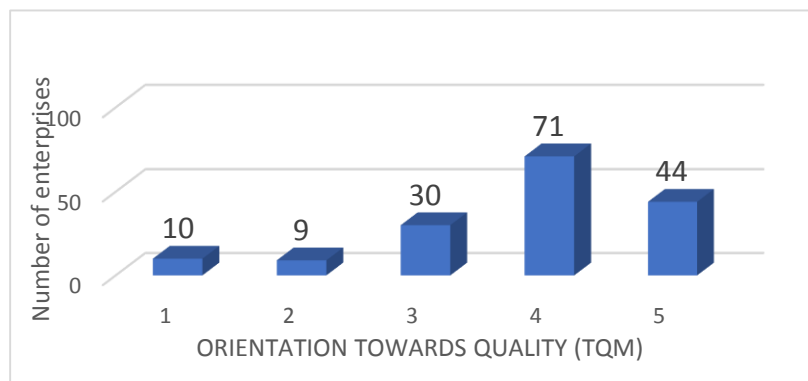


Figure 3. The structure of enterprises taking into account the level of care for relations with suppliers (#A2).

Source: Own study.

A comparison of the values of the average ratings of the analyzed aspects in groups of enterprises with different employment sizes is presented in Figure 4. In the research process, enterprises were classified into a group based solely on their employment size. The small ones are those employing up to 50 people. Employment in large enterprises exceeded 250 people. It is worth emphasizing that in the studied group of representatives there were 26 small, 40 medium and 100 large enterprises.

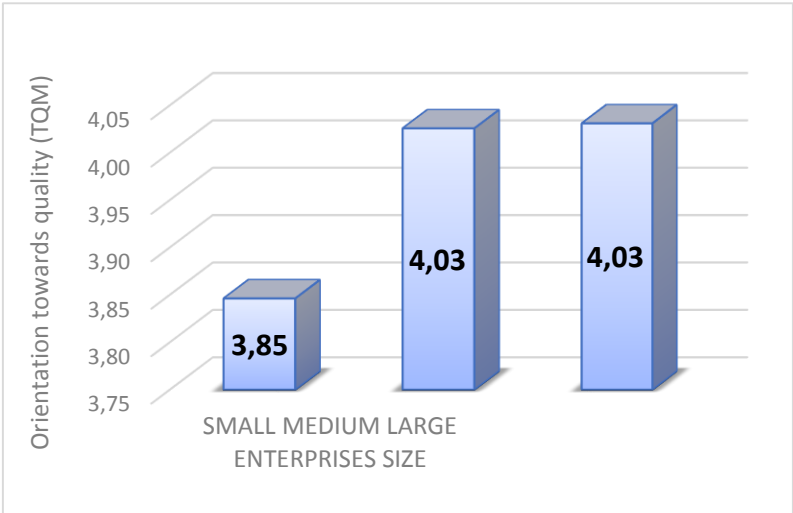


Figure 4. Comparison of levels of attitude towards cooperation with proven suppliers among enterprises of various sizes.

Source: Own study.

Based only on the values of the average ratings, the research results presented in Figure 4 prove that the quality policy is more strongly focused on certain suppliers and is conducted by large and medium-sized enterprises. These two groups of enterprises obtained the best result, namely, 4 points on average.

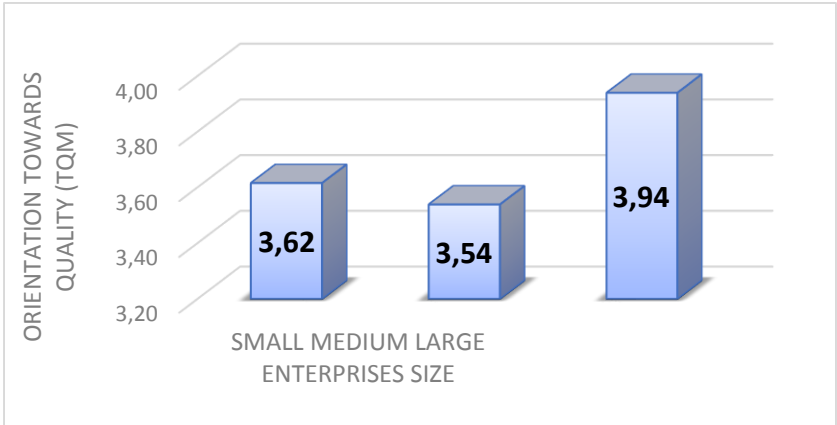


Figure 5. Comparison of the levels of caring for relations with suppliers among enterprises of various sizes.

Source: Own study.

The results of the research show the difference between the focus on supplier qualification and taking care of supplier relationships. Research shows that these relationships are best maintained by large companies. The average value in this group was 3.94 points. Small enterprises show greater care for relationships (3.62 points) than medium-sized enterprises, which recorded a score of 3.54 points. The results of the research in the discussed scope are presented in Figure 5.

The factor shaping the quality policy is the independence of the company's top management in defining and implementing it. It is normal that ownership and capital, licensing or, for example, franchise ties cause external power centers to impose quality standards and supervise their implementation. In the course of the research, the independence of the company in terms of setting quality standards within the meaning of organizational practices was identified. In the surveys, the respondents indicated the source of setting formal standards, which allowed them to be classified into one of the following groups:

- full independence – quality standards are set by the direct management of the company,
- national dependence – standards are set by an external national board,
- foreign dependence – standards are set by external foreign management.

The research results presented in Figure 6 concern 164 enterprises for which the independence form was determined. In the studied group of enterprises, 68 claimed full independence, 19 stated national dependence, and 77 declared their dependence in terms of quality on foreign management.

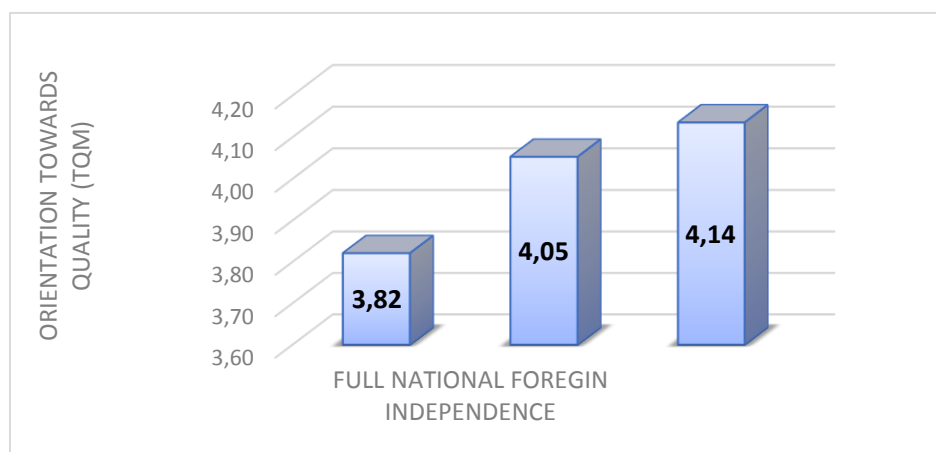


Figure 6. Comparison of attitude levels towards cooperation only with proven suppliers among enterprises of various independence.

Source: Own study.

Research shows that the focus on cooperation only with proven suppliers is the strongest in companies with foreign sources of quality standards. These enterprises obtained an average of 4.14 points. Enterprises with national dependence are slightly less focused on quality in the examined aspect (4.05 points). The group of independent enterprises achieves the worst result in this comparison, i.e., 3.82 points. It turns out that some supervision pressure from external centers results in a natural increase in quality orientation in selecting qualified suppliers.

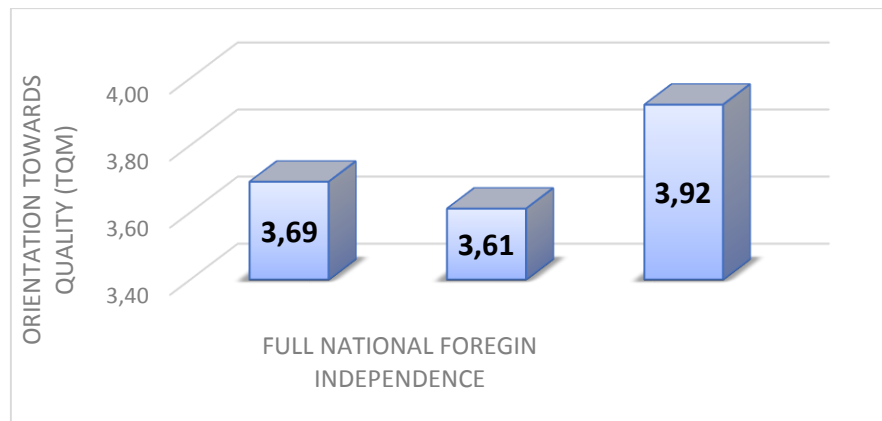


Figure 7. Comparison of the levels of caring for relations with suppliers among enterprises of various independence.

Source: Own study.

Companies dependent on foreign boards are most concerned with maintaining good supplier relations (3.92 points). Interestingly, enterprises with national dependence look the worst in this ranking (3.61 points). Independent enterprises fare slightly better in this respect (3.69 points). The test results regarding aspect #A2 in the scope are included in Figure 7.

5. Conclusions

The analysis of the research results proves that based on the average value of the ratings, it can be concluded that the surveyed companies are well-oriented towards cooperation with proven, reliable suppliers. The average value of this strength is 4.0 points (on a scale 1-5). To a lesser extent, the surveyed enterprises care about relations with partners. This is evidenced by the average value of the grades, which is 3.79 points in the entire study group.

Medium and large enterprises are most firmly focused on ensuring the quality of supplies through cooperation with proven suppliers. The greater power of influence on suppliers by larger enterprises allows them to adopt and apply high requirements in selecting and evaluating suppliers. The quality policy of the largest enterprises is also most strongly focused on caring for relations with suppliers. The average value is 3.94 points. Notably, enterprises from the small group take better care of the relationships (3.64 points). In the group of medium-sized enterprises, the value is lower – 3.54 points. The research results prove that large enterprises implement a quality policy more strongly focused on the supply quality.

Enterprises dependent on foreign boards are more intensely focused on cooperation with proven suppliers (4.14 points) compared to those managed from the domestic HQ (4.05 points) and completely independent (3.82 points). Similarly, enterprises dependent on foreign boards care the most about supplier relations (3.92 points). Entirely independent enterprises perform worse in this respect (3.69 points). Interestingly, enterprises with national dependence are the least successful in building supplier relationships (3.61 points).

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