

## Chapter 13

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### **IDENTIFICATION OF PROBLEMS IN IMPLEMENTING ISO 9001 ON THE EXAMPLE OF THE COMPANY MANUFACTURING POLYPROPYLENE FABRICS AND YARNS**

**Abstract:** The numbers of problems in implementing ISO 9001 is the main cause why Polish companies are afraid to do such a thing. The need of development of the companies should force them to increase the quality of their products by implementing different norms. ISO 9001 as very demanding norm of quality management to 2015 was implemented only in 10% of Polish companies. On the example of the company which manufacture polypropylene fabrics and yarns we will show what problems can appear when implementing the strategy and what are they ways of solving them.

**Key words:** ISO 9001, quality management, quality tools, polypropylene fabrics and yarns, manufacturing company

#### **13.1. Introduction**

Quality is extremely important term in modern, competitive world. It is quite hard to define the concept on quality. This is due to the fact that for every one of use the quality can mean something different. From the ancient times many scientists and practitioners tried to define what exactly is quality, many definitions in different aspects (philosophical, technical, economical, law, psychological) can be found. Definitions

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of quality were also created for the need of qualitative norms, where was stated that quality is the totality of properties of the object which are strictly connected with its capability to fulfil its ascertained or expected needs. As the quality system we can named systematic and planned activities that are implemented in the process of creation of the given product, which gives guarantee that the product will fulfil established, agreed with the customer requirements. The main feature of well-designed and capable functioning system is its consistent streamlining, as well as improvement of all production and non- production processes, improvement of final goods and services that an enterprise offers. To make the enterprise competitive in the quality field, so to win in the competition race, it is necessary next to the properly functioning of the quality system to give the whole enterprise direction to the quality as the main goal of the production processes. External focus on the quality norms of all products and services the company offers is made to be able to match all the requirements and needs of customers. The main role of producers is to create and deliver the product of the highest possible quality so to make the customer entirely satisfied. The requirements determined in ISO 9001 norm thanks to its simple and logical conformation create an efficacious way for the realization of all strategic targets of the company directed on the quality of produced goods and offered services. As a matter of fact, the family of ISO 9001 norms is the system that guarantee assurance the quality. In practice we can describe ISO 9001 in three points:

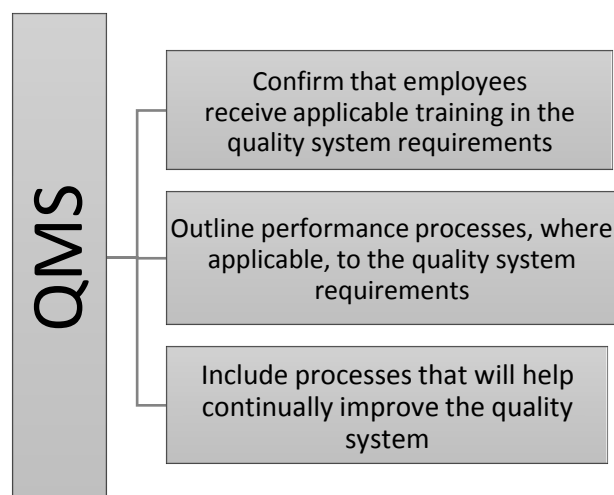
- Show what are you doing- the creation of control and quality system
- Proceed according to established processes
- Presentation of compatibility of your quality system to the external auditor

All the ISO 9001 norms comprise the international structure of quality system norms, which are still developing and constitute consistent group. They define almost every action that the employee has to made during the production process, tasks that are assigned to the management and the

way how all the products delivered by co-producers should be checked. The quality control is made on every step of the production, it includes design and finished on the ecological elimination of rubbish.

### 13.2. The main aim of ISO 9001

ISO 9001 is the standard (title of the document) that outlines all the requirements the company has to make in their quality system. What is important ISO 9001 is the only ISO standard that requires certification. Another important fact is that the standard ISO 9001 does not define the actual quality of a given product or service. This is the standard that helps the enterprise to achieve consistent results and continually improve the process. The norm ISO 9001 is the example of the Quality Management System, which simply can be described as the set of different policies, processes and procedures required for planning and production in the given company. The concept of QMS is quite clear and is shown on the below chart.



**Fig. 13.1. Concepts of QMS**

*Source: own elaboration*

ISO 9001 is important for the company because it can provide maximum benefit:

- Having the certification will help the company get new customers
- By ISO 9001 the present clients will get exactly what they want- so that their requirements will be met
- The QMS will improve the level of production in the enterprise
- The QMS will improve efficiency, reduce waste and save money in every business where it will be implemented

In Poland the ISO 9001 certificate has only around 10 thousand of companies, which is only around 10% of all enterprises. In comparison to European Union countries it is a very little number of companies that has this standard. It is estimated that enterprises with ISO 9001 comprises 35% of all companies in European Union. By giving consideration why the result in Poland is so low the first thing that appears is the lack of enough awareness of employees (both in the management and blue collar workers) about what exactly is ISO 9001 and what benefits it can bring into the company, apart from many documents and procedures- what is just a wrong interpretation. Another factor is that management often think that implementing ISO 9001 can cause many problems hard to solve, so that will cost extra work which they do not really want to perform. Other thing that can indicate such a low number of implementations of ISO 9001 in Poland is the cost of the whole venture.

ISO 9001 is quite flexible; in some aspects it does not specify exactly what an organization must do in case to implement it. The standard allows the company to customize it to ensure its individual success, instead of blindly following the standard. The enterprise must figure out the best way to meet the requirements. At first the company has to determine what is most important for its success and build the Quality Management System around this fields which were taken as the most valuable. Then

there is the need to identify the risks and opportunities the standard can bring. Most companies can achieve to get a certification within 3 to 6 months depending in the size of enterprise and its complexity. In the table below we present some steps that has to be done to implement ISO 9001.



**Fig. 13. 2. Steps to implement ISO 9001**

*Source: own elaboration*

As we can observe from the above figure there has to be minimum two audits during introducing ISO 9001 in the company, the first one should be an internal audit, which also can be done by the external company when such a company is responsible for introducing the norm in the company and the final certification audit which is the most important on the whole way to get the certification. The norm ISO 9001

gives the company possibility to observe how the company works and to introduce all the necessary changes in order to get bigger profit and more customers.

### **13.3. Amendment of ISO 9000 in 2015**

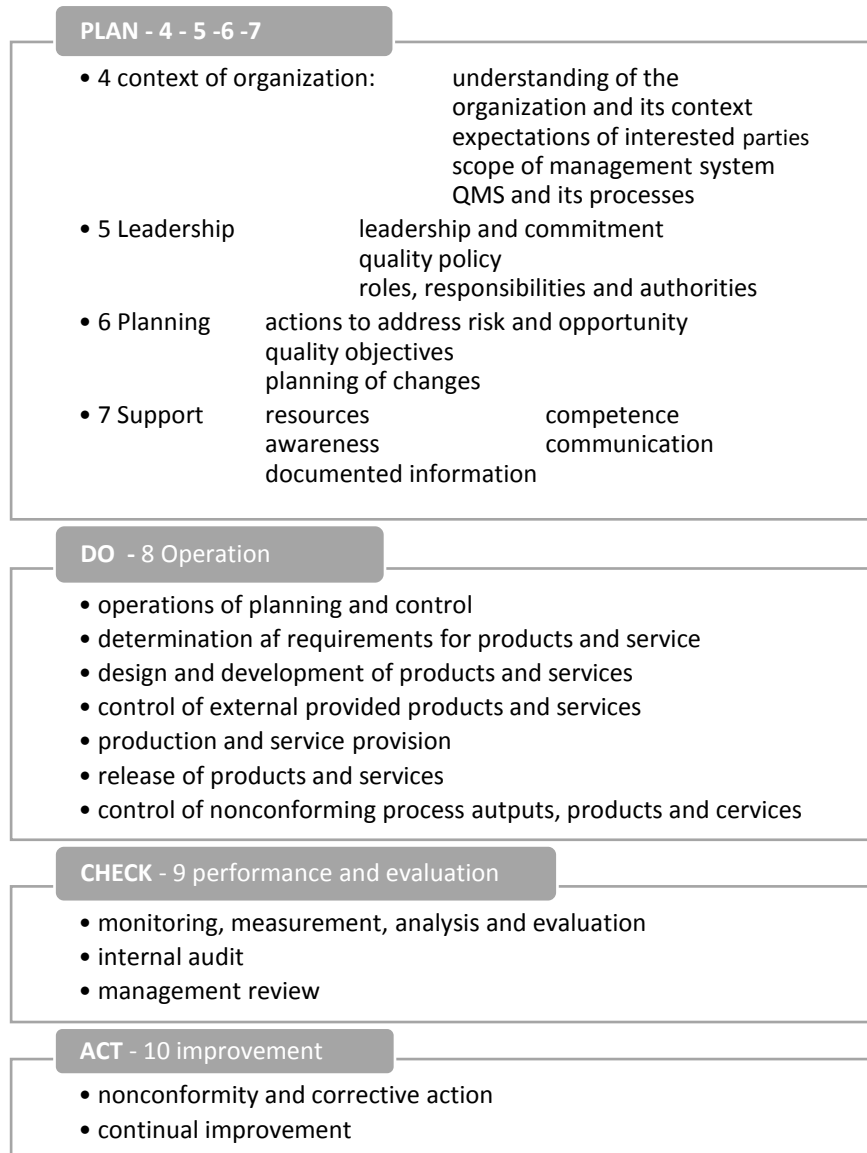
In 2015 in the areas of ISO 9000 came into effect a significant revision of the guidelines. The update is going to impact organizations that are already certified, certification bodies, companies under ISO 9001 implementation process and ISO certification consultants. A transition period of 3 years is given to all the organizations certified to ISO 9001:2008. However, the current version will phase out eventually. ISO 9001:2015 has been drafted to last at least for a decade without any change. With an ability to adopt the dynamic business environment, ISO is relevant and useful for small, medium and large enterprises.

In the new version of ISO 9001 QMS, Quality Management becomes everyone's responsibility and not limited to Management Representative only, as it was in the earlier version. Each aspect of organizational environment should focus on quality. QMS is based on a well-known and widely used the Deming wheel. ISO elements are shown in Fig. 14.3.

A fundamental principle of the scientific method and PDCA is iteration—once a hypothesis is confirmed (or negated), executing the cycle again will extend the knowledge further. Repeating the PDCA cycle can bring us closer to the goal, usually a perfect operation and output.

New standard has been drafted to make it relevant to industries. It has been made more generic as compared to the draft of earlier versions.

The proposed draft emphasizes more on a process-based quality management system. Certainly it is a strategic decision, but the new standard also looks at how technology is going to fit in the context. Quality Management System offers a collaborative and centralized environment so that policies and procedures can be maintained properly. It also emphasizes on the flexibility of adapting to different processed so that they match with the committed quality standards of an organization. It helps in building necessary functionality for the same



**Fig. 13.3. PDCA in new ISO 9001:2015**

Source: study on base PN-EN ISO 9001:2015

### 13.4. Identification of problems

Introducing ISO 9001 can cause many problems in the company, we can even state that in every field of the company we can find problems about the certification norm. All problems can be divided into four main categories, which are presented in the figure 13.4.

Management factors	<ul style="list-style-type: none"><li>• Lack of responsibility among different management cadre</li><li>• Lack of support</li><li>• Lack of common goals in the company</li><li>• Not enough knowledge about ISO certification</li><li>• Not enough commitment from the management</li></ul>
Financial factors	<ul style="list-style-type: none"><li>• Limited personal and financial sources</li><li>• Difficulties with achieving all the norm requirements</li><li>• Not planned costs of certification in the year budget of the company</li><li>• Lack of correlation of the budget with planed proceedings</li></ul>
Human factors	<ul style="list-style-type: none"><li>• Habit to old style of work</li><li>• Lack of communication</li><li>• Lack of commitment</li><li>• Resistance and reluctance of workers</li><li>• Lack of specific instruction which will allow to understand the norm by workers</li><li>• Anxiety ahead of new things</li></ul>
Process factors	<ul style="list-style-type: none"><li>• Too short time planned to introduce the norm</li><li>• Lack of communication</li></ul>



	between divisions of the company <ul style="list-style-type: none"> <li>• Lack of necessary trainings</li> <li>• Controversial interpretations of norms</li> <li>• Lack of schedule</li> <li>• Too many unsupervised documents</li> </ul>
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**Fig. 13.4. Problems when introducing ISO 9001**

*Source: own elaboration*

There are a lot of problems which can appear during introducing ISO 9001 or even any other ISO norm. Often giving up the ISO norm is the effect of many problems which can create an iceberg which is impossible to overcome by many companies. The problems mentioned above and many others can be solved or bypassed if to the process of ISO implementation company will come resolute, by analysing all potential problems as well as the possibility of the company. What has to be remembered that the process of implementation of ISO 9001 is not quick and easy, it takes a lot of effort as well as from the management and workers.

The decision about undertaking the certification is in most cases feast by the board of directors- but often their role is finishing on that step in this field. Preoccupation only in the final result cause that workers and management feel the pressure, in most cases they do not have enough support and finally it appears that for the whole process only one person is responsible. In such a case the implementation never can be done correctly. The workers are also stressed because they often think what the supervisor will tell if there will appear some incompatibilities. That is why the role of the board of directors is extremely important in the whole process of implementation. They should get to know the schedule of the project works; what costs will appear on every step of deployment. What we have to underline it is unacceptable that the management and the higher directorship will not have the full knowledge about what is ISO 9001 and what benefits it will bring apart from the raise of attractiveness

on the market. So when creating a schedule, the company cannot forget about the relevant trainings for all employees. Thanks to such trainings the management will also know how to create procedures, and they will be able to write or at least accept the necessary documents. The work with the implementation of ISO should be corporate and respectively divided. The aims of implementation should be strictly determined and common for whole company. The workers should not feel that they are only graded and in any case they should not be afraid of losing their job. What is good to know is the fact that when the company cannot well prepare and implement ISO standard by itself it can always use the consulting company, which can be really helpful and can eliminate most possible problems.

### **13.5. The way of solving problems on the example of the company manufacturing polypropylene fabrics and yarns**

The company that produces semi-final and final goods always increase its image among customers and clients by gaining new certificates. That is why the company which example is taken for this chapter of the article decided to introduce ISO 9001 in 1999, and they finally get certification in 2002. They had three years of very hard work and they were able to avoid and eliminate many problems.

At first from the management factors they meet the problem with the lack of knowledge about ISO certification among the management. Well prepared trainings, which were organized by the external company allow to eliminate this problem and also the same they avoided the problem with the commitment from the management, because after training they understood why ISO 9001 was so important for their company. At the same they were able to set up the common goals in the company.

From financial factors the most important problem for our company were difficulties with achieving all the norm requirements, that is why the board of directors as well as the management decide to modernise the company by introducing the new equipment and also from the other hand

by modernising the way of documentation circulation in the company.

The most problems appeared in the human factors, especially among blue collar workers who did not at first understand why all the changes were necessary if in their opinion company was prospering quite good. There was lack of communication between workers and management as well as resistance and reluctance of the labourers. The company solved this problem in quite reasonable way- they provided special training for the labourers provided by the management. Also the internal auditors were introduced to the workers, so that they exactly knew who will be checking the results of their work and they do not have so high pressure about audits. Another interesting aspect is that the company introduced special programmes for the workers who will have the best results in their work and whose audits will achieve the highest notes.

The company did not have any problems with too short time planned to introduced the norm- they have themselves three years to fill all the necessary requirements for the certification and that was enough. At first they had too many unsupervised documents, but after modernising the way of documents flow the problem was quickly solved what was important especially for the management.

### **13.6. Summary**

Quality should be the most important term for any company which wants to be noticeable on the market. The norm ISO 9001 as the only ISO norm which needs certification is the perfect example of quality which in the case of this norm any company small or very big, producing or selling can introduce. ISO 9001 define every action which workers has to perform, that is why it can cause many problems, which were described in the above article. As we can observe from the point of view of the big, manufacturing company all the problems can be solved or even eliminated when the strategy of implementation is excogitated and well prepared. The company which example was shown in this article was able to achieve the ISO certification in three years, what shows that it is possible to achieve it in a specific, not long time. As it was mentioned

in Poland ISO 9001 certification has only around 10% of enterprises, which by looking on the whole European Union percentage is a relatively small number. There are still a lot of companies which even we can say, should introduce certification because then their external and also internal image can improve. Polish companies has to become more and more conscious about the importance of quality issues. From the scientific point of view ISO standardization should become something totally normal for every company, especially for producing companies, in order to increase quality. The society is becoming more and more demanding so that the products has to consummate to more norms and certificates

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