An Analysis of the Implementation of a Quality Management System in Intellectual Property Organization

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ABSTRACT

Intellectual property includes the legal rights and protection afforded to innovation and creativity, such as patents, trademarks, copyrights, and trade secrets. An "intellectual property protection organisation" refers to an institution whose management focuses its activities and efforts on the protection of intellectual property rights (IPR). These organisations' primary mission is to provide support and services for the protection and administration of the intellectual property rights of individuals, companies, or other entities. Quality Management System (QMS) is a strategic approach adopted by organisations to ensure the quality of products or services offered. This system aims at the satisfaction of activities and the achievement of organisational objectives, in accordance with international standards, such as ISO 9001:2015. Analysis of the implementation of a Quality Management System (QMS) in intellectual property organisations, including a complex and strategic process involving the evaluation, planning, and detailed implementation of the system to ensure success and compliance with organisational standards.

KEYWORDS: *intellectual property, management system, standard, quality.*

JEL CLASSIFICATION: *O30.*

1. INTRODUCTION

The term "intellectual property organisation" (IP) is not a standard concept or a specific entity but generally refers to organisations or institutions involved in the management and protection of intellectual property rights. Intellectual property includes legal rights granted to creators and owners of innovations, creations, and brands. In general, the term "intellectual property organisation" does not designate a specific entity but refers to any organisation, agency, or institution involved in the management and protection of intellectual property (IP) rights. Intellectual property covers the legal rights granted to inventions, artistic creations, trademarks, industrial designs, copyrights, and other matters related to creativity and innovation. These organisations can be of many types and have various roles with respect to intellectual property (Press, 2019).

Each of these organisations has its role in promoting and protecting intellectual property rights in various fields. It is important to emphasise that these organisations do not directly grant intellectual property rights but facilitate the process of registration and protection of these rights in accordance with national and international law (Olaru, 2000).

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The Quality Management System (QMS) represents a strategic approach adopted by organisations to ensure and improve the quality of products or services offered. This system aims at customer satisfaction and the achievement of organisational objectives, according to international standards such as ISO 9001:2015 (Goel, 2019).

2. MAIN OBJECTIVE OF THE PAPER

The main objective of the paper is to evaluate the elements necessary for the implementation of a QMS in an intellectual property organisation. In this context, the chosen research method is to collect information from various previous works and research, taking into account the specified organisational specifics but also the key points of the implementation of a QMS:

a) **The ISO9001:2015 standard** is a recognised international norm for SMC, establishing requirements for such a system. This covers aspects such as resource management, organisational processes, performance measurement, and continuous improvement.

b) **Objectives of QMS** - The main goal of QMS is to improve the quality of products or services. Organisations set specific goals to achieve this goal, such as reducing defects, increasing customer satisfaction, and streamlining processes (Olaru, 1999).

c) **Documentation** - Implementing a QMS involves documenting organisational processes and procedures, ensuring transparency and direction in the implementation of activities.

d) **Management Responsibility and Involvement** - Management involvement and commitment are crucial to the success of a QMS. Management must establish the strategic direction, allocate resources, and ensure the understanding and support of quality objectives within the organisation (Natarajan, 2017).

e) **Measurement and Monitoring** - The QMS involves the collection and analysis of data to evaluate the organisation's performance. Regular monitoring and measurement of key performance indicators (KPIs) helps to identify the strong and weak points of the processes.

f) **Audits and reviews** - Organisations conduct internal audits and periodic reviews to ensure compliance with standards, identify opportunities for improvement, and manage risks.

g) **Continuous improvement** - The fundamental principle of QMS is continuous improvement. Organisations are encouraged to identify opportunities for improvement, implement corrective and preventive actions, and learn from experience.

Implementing a QMS brings benefits such as increased operational efficiency, improved customer relations, reduced risk, and increased competitiveness. It is crucial that the SMC is adapted to the specificities of the organisation and is constantly updated to respond to changes in the business environment (Jones, 2012).

The documents from which the selection was made are an important part of the specialised literature in the field of service and product quality, being relevant through the validity and topicality of the arguments presented (Radziwill, 2013).

3. IMPLEMENTATION ANALYSIS OF A QUALITY MANAGEMENT SYSTEM (QMS)

Each of these organisations has a specific role in protecting and promoting intellectual property. They can work together to ensure an efficient and fair framework for the management of intellectual property rights at the national and international levels. Some examples of the intellectual property organisations are shown in Table 1.

Each of these organisations contributes to the global intellectual property ecosystem and has its own specific role in promoting, protecting, and managing intellectual property rights in different fields and industries (Oprean et al., 2011).

The implementation of a Quality Management System (QMS) in intellectual property organisations is a complex and essential process for organisations that want to ensure and maintain high quality standards for services offered to the public (David, 2017).

Table 1. Main intellectual property organisations

Intellectual property organisations	Activity
Patent, trademark and industrial design offices	These are government agencies responsible for granting and managing patent, trademark, and industrial design rights. Examples include the United States Patent and Trademark Office (USPTO) or the European Patent Office (EPO).
International organisations	Examples include the World Intellectual Property Organisation (WIPO), which provides a global framework for intellectual property cooperation.
Copyright management organisations	These organisations manage copyright on behalf of creators. They collect and distribute royalties for the use of copyrighted works. Examples include the American Society of Composers, Authors, and Publishers (ASCAP), Broadcast Music, Inc. (BMI) and the Society of European Stage Authors and Composers (SESAC) in the field of music.
Industrial and trade associations	Various industries have associations or organisations that work to protect the common interests and intellectual property rights of their members.
Academic institutions and research	Universities, research centres, and laboratories may have their own infrastructure for managing and protecting intellectual property rights resulting from research.
Law and consulting firms	Some legal and consulting firms offer specialised intellectual property services to their clients.

Source: adapted from (Oprean et al., 2011)

Implementing a QMS in intellectual property organisations helps streamline operations, increase customer satisfaction, and maintain a high level of quality in all aspects of intellectual property activities. It is important to be a continuous process, adaptable to changes in the industrial environment and technological developments (Davenport & Prusak, 2018).

Modern quality management systems (QMS) are designed to ensure effectiveness and compliance with quality standards in an organisational environment. These systems integrate innovative approaches, advanced technologies, and efficient processes to improve organisational performance and meet customer requirements.

The implementation analysis of a QMS involves a number of steps and important aspects to ensure the success and effectiveness of the system. These stages of the implementation are shown in Figure 1.
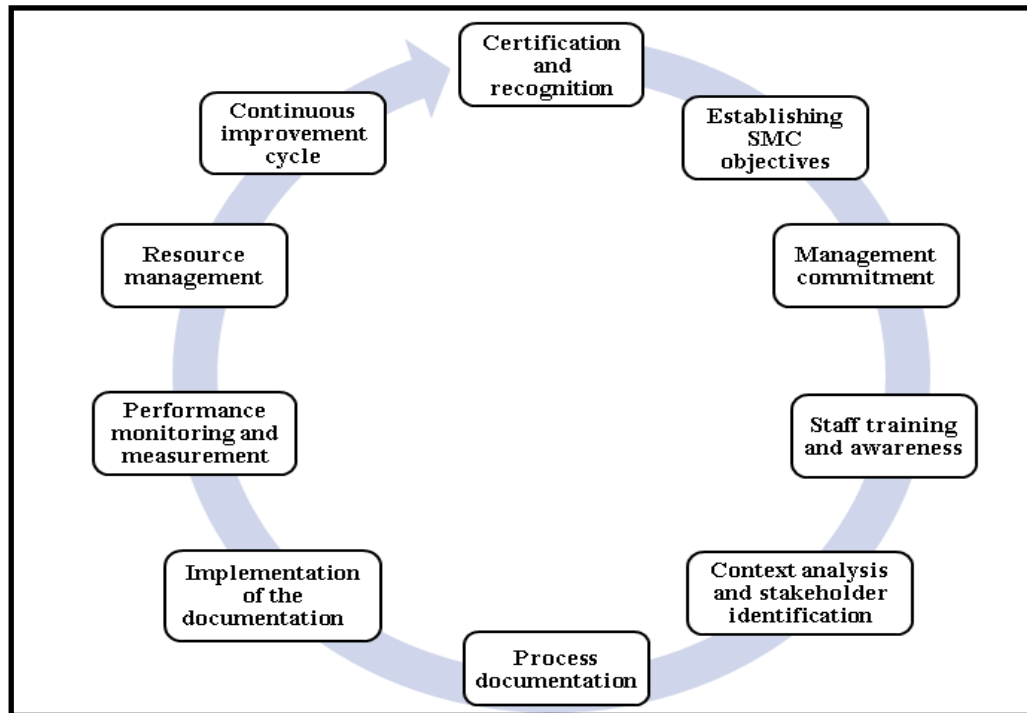
Figure 1. Stages of creating a quality management system
Source: adapted from (Davenport & Prusak, 2018)

In the specialised literature, the main stages of implementing a Quality Management System (QMS) are:

1. Establishing SMC objectives:
  ➢ Identifying clear and measurable objectives of the QMS.
  ➢ Ensuring the alignment of these objectives with the general organisational strategies.

2. Management commitment:
  ➢ Involvement and support of the organisational management in the implementation of the SMC.
  ➢ Allocating the necessary resources to implement and maintain the system.

3. Staff training and awareness:
  ➢ Ensuring training and awareness of employees on the importance of QMS.
  ➢ Providing appropriate training to ensure understanding of QMS concepts and responsibilities.

4. Context analysis and stakeholder identification:
  ➢ Assessing the business environment and the organisational context to identify risks and opportunities related to quality.
  ➢ Identification of stakeholders and their expectations regarding the quality of products or services.

5. Process documentation:
  ➢ Identification and documentation of all processes relevant to quality.
  ➢ Definition of work procedures and instructions to ensure compliance with quality standards.

6. Implementation of the documentation system:
  ➢ Development and implementation of quality management system documents such as quality manual, procedures, process maps, etc.

7. **Performance monitoring and measurement:**
   ➢ Implementation of Key Performance Indicators (KPIs) to evaluate the success of the QMS.
   ➢ Establishing a system of regular monitoring and internal auditing to ensure system compliance and effectiveness.
8. **Resource management:**
   ➢ Allocating of the resources necessary to implement and maintain the QMS.
   ➢ Ensuring the qualification and competences of the personnel responsible for the implementation of the QMS.
9. **Continuous improvement cycle:**
   ➢ Implementation of a continuous QMS review and improvement process.
   ➢ Collecting feedback and data to identify opportunities for optimisation.

10. Certification and recognition - Depending on the organisation's needs, evaluating the possibility of certification according to international standards such as ISO 9001:2015 (Peckford, 2016).

The implementation analysis of an SMC must be adapted to the specifics of the organisation. For intellectual property organisations, the services offered to the public must be taken into account, as well as the legislation applicable in this field. It is important that this review be a flexible and adaptable process that allows for adjustments to industry changes and changes in the legislative framework.
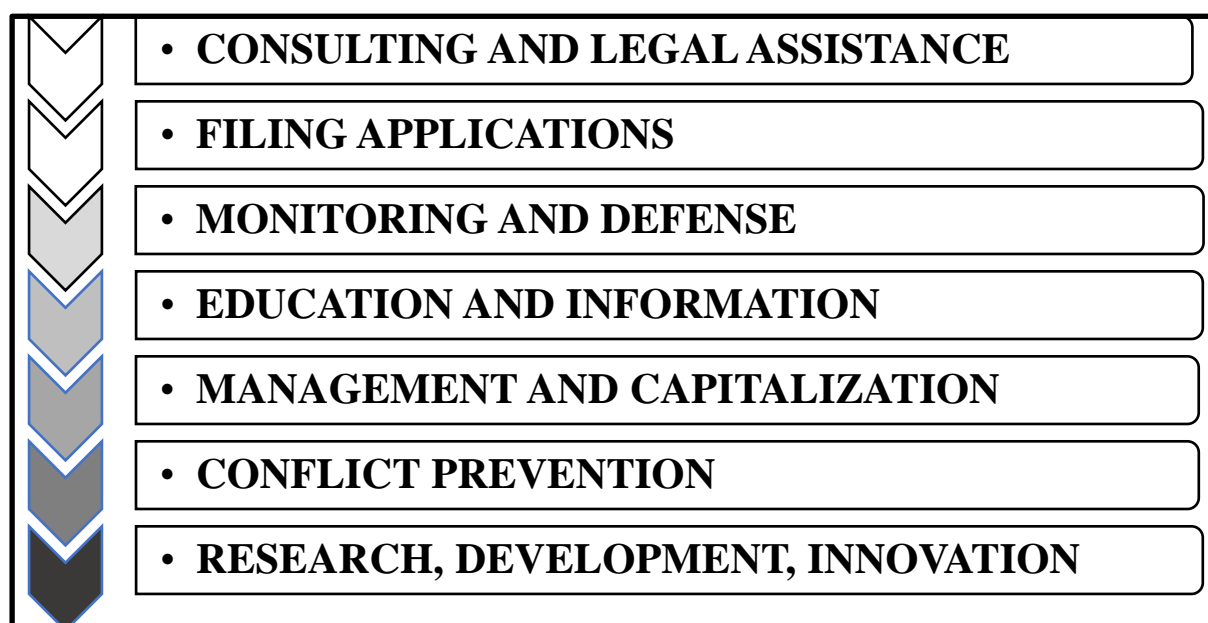The main activities carried out by such organisations are presented in Figure 2.

- **CONSULTING AND LEGAL ASSISTANCE**
- **FILING APPLICATIONS**
- **MONITORING AND DEFENSE**
- **EDUCATION AND INFORMATION**
- **MANAGEMENT AND CAPITALIZATION**
- **CONFLICT PREVENTION**
- **RESEARCH, DEVELOPMENT, INNOVATION**

Figure 2. Activities carried out by intellectual property organisations
Source: adapted from (Peckford, 2016)

1. **Legal advice and assistance** by providing legal advice and assistance for obtaining and maintaining intellectual property rights.
2. **Filing of applications** by assisting customers in the process of filing applications for patents, trademarks, copyrights, or other forms of intellectual protection.
3. **Monitoring and defence** by monitoring the market to identify possible infringements of intellectual property rights and actions to defend these rights.

4. **Education and outreach** by providing information and training on the importance and procedures of intellectual property protection.
5. **Management and exploitation** by helping customers manage and exploit their intellectual property portfolio, including through licences or transfers of rights.
6. **Conflict prevention** by identifying potential intellectual property conflicts and providing strategies to avoid or resolve them.
7. **Research, development and innovation** by supporting research and development activities to stimulate innovation and ensure the fulfilment of intellectual property protection requirements.

Such organisations are essential in today's economic context, where innovation and creativity play a crucial role in a company's success. By providing specialised services and expertise in the field of intellectual property, these organisations contribute to the protection of investments and creative rights of individuals and the business environment (Mehran & Mehran, 2013).
The implementation review of a Quality Management System (QMS) is a complex and strategic process involving the evaluation, planning, and detailed implementation of the system to ensure success and compliance with organisational standards and objectives. In Figure 3 the main steps in the implementation analysis of a QMS are presented.

**Figure 3. Stages of achieving a quality management system
in intellectual property organisations**
Source: adapted from Hewitt (2019)

1. **The initial assessment includes the following:**
➢ identifying organisational objectives: determining the general and specific objectives of the organisation in terms of the quality of products or services;

➢ analysis of the organisational context: evaluation of internal and external factors that can influence the performance and quality of the organisation (Hewitt, 2019);

2. Leadership and organisational commitment:

➢ obtaining the management's support: ensuring the commitment of the management in the implementation of the QMS by allocating resources and establishing the strategic direction (Maxim, 2022);

➢ employee awareness and involvement: ensuring that all members of the organisation understand the importance of the QMS and assume responsibilities in implementation;

3. Establishing QMS documentation:

➢ quality policy development: defining policies and the organisation's commitment to quality (Gravells, 2016);

➢ documenting processes and procedures: identifying and documenting organisational processes, including how they will be monitored and measured;

4. Training and development:

➢ training program: developing and implementing a training program to ensure that employees understand and apply the requirements of the QMS in their daily activities;

5. Implementation and monitoring:

➢ QMS implementation: the effective introduction of QMS processes and procedures at all organisational levels;

➢ monitoring and measurement: implementing QMS performance monitoring and measurement systems to assess compliance and effectiveness;

6. Audit and review:

➢ internal audits: conducting regular internal audits to assess the effectiveness and compliance with the requirements of the QMS;

➢ management review: conducting periodic reviews by management to assess QMS performance and identify opportunities for improvement;
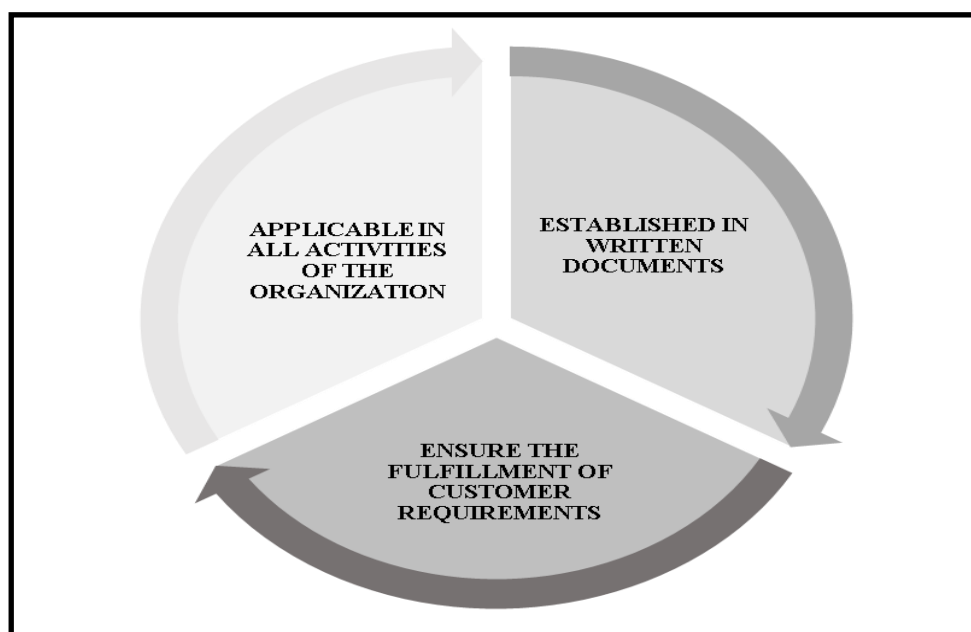

Figure 4. The modern quality management system with the main characteristics
Source: adapted from (Maxim, 2022)

7. Continuous improvement:
➢ corrective and preventive actions: implementation of corrective actions to remedy nonconformities and preventive actions to prevent their recurrence;
➢ research of improvement opportunities: continuous identification of opportunities to improve organisational processes and performance (Oprean & Ţîţu, 2008);

8. Certification (optional):
➢ certification process: if necessary or desired, participation in the certification process offered by independent certification bodies to validate compliance with standards, such as ISO9001:2015;

Figure 4 shows the main characteristics of a modern quality management system.
By going through these stages and continuously engaging in process improvement, the organisation can achieve an efficient and effective quality management system that supports the achievement of quality objectives and long-term success.

4. SPECIFIC ASPECTS OF THE IMPLEMENTATION OF QUALITY ASSURANCE SYSTEMS IN E-SERVICES

The electronic services that intellectual property organisations offer to the public refer to the provision of services using information technology and electronic communications, especially the Internet. The main characteristics of electronic services are presented in Table 2.

Table 2. The main characteristics of electronic services

No	Characteristics	Details
1	**Global accessibility**	Electronic services are available on a global scale, providing access to information and functionality regardless of the user's geographic location.
2	**Interactivity**	Users can directly interact with e-services, making transactions, receiving real-time information, or participating in online processes.
3	**Automation**	Processes are often automated, reducing the need for human intervention. For example, automatic payments or instant transaction confirmations.
4	**24/7 availability**	Electronic services are available 24/7, unaffected by regular business hours or public holidays.
5	**Personalisation**	The ability to customise and adapt the services according to the individual preferences and needs of the users.
6	**Security**	Emphasis on information and transaction security, with the implementation of encryption protocols and other security measures to protect data privacy and integrity
7	**Mobility**	Ability to access e-services from various mobile devices such as smartphones and tablets for a flexible user experience.
8	**The transition from physical to electronic**	Replacing traditional or physical services with their electronic variants. For example, electronic bank statements instead of printed ones or electronic tickets instead of printed ones.
9	**Integration with other services**	The ability to integrate with other services or platforms to provide a complete and seamless experience. For example, integrating online payments with e-commerce platforms.
10	**Data analysis**	Collecting and analysing data on user behaviour to improve services and provide personalised recommendations.
11	**Fast problem solving**	Providing effective problem-solving and customer support channels, often through online chats, support platforms, or incident systems.

Source: adapted from (Maxim, 2022)

E-services can cover a wide range of activities, from online financial transactions and e-commerce to online government services and digital entertainment platforms. These features

reflect the continuous evolution of services in the digital age and the impact of information technologies on the way we interact with different services (Talib et al., 2010).

Electronic services are of significant importance for intellectual property (IP) organisations for various reasons, contributing to the efficiency of processes, the expansion of services offered, and the improvement of the relationship with users (Roș, 2016).

In conclusion, e-services contribute significantly to the modernisation and improvement of the quality and efficiency of intellectual property organisations, facilitating the management, protection, and promotion of intellectual property rights in an efficient and accessible way

5. CONCLUSIONS

Quality management systems (QMS) are an essential framework for organisations in ensuring and maintaining the quality of their products and services. Following the analysis and implementation of a QMS, it can be concluded that the importance of QMS is underlined by its crucial role in achieving and maintaining high-quality standards. These systems are an effective way to organise and manage processes, improve performance, and meet customer requirements. Customer orientation is achieved by the fact that the QMS places the customer at the centre of concerns, emphasising the importance of understanding and satisfying his needs. Customer feedback and experience are used to continually improve products and services. In this context, the operational efficiency of implementing an SMC leads to increased operational efficiency by optimising processes, reducing errors, and eliminating unnecessary activities. This translates into savings in time and resources.

Risk management and failure prevention in that QMS facilitates effective risk management and the adoption of a preventive approach. Organisations are encouraged to anticipate and prevent problems instead of solving them after they occur. The role of the organisation's employees involves them and makes them responsible at all levels in maintaining a QMS. All members of the organisation have defined roles and responsibilities within the system, helping to increase awareness and commitment. Performance measurement and monitoring are achieved by the fact that QMS includes the constant measurement and monitoring of performance through key performance indicators (KPIs). This allows the organisation to measure success in achieving its goals.

Continuous improvement implies the existence of the concept of continuous improvement, which is fundamental in QMS. By constantly analysing data and feedback, organisations can identify opportunities for improvement and implement changes to increase effectiveness and efficiency. Compliance with international standards is achieved by the fact that the implementation of the SMC ensures the organisation's compliance with recognised international standards, such as ISO9001:2015. They build trust with stakeholders and can open up new business opportunities. It should be emphasised that the involvement of management in the sense that the implementation of an SMC requires a strong commitment from the management of the organisation. Involvement of leaders is essential to ensure the necessary resources, support, and direction for the success of the system. Adaptability to change, which highlights that a QMS must be adaptable to changes in the business environment and facilitate organisational innovation and agility. This aspect is crucial to maintain competitiveness.
In conclusion, the implementation of a quality management system in intellectual property organisations is a complex process, but beneficial for organisations. It provides a structured

framework to achieve and exceed quality standards, contributing to the long-term success of the organisation but, above all, to customer satisfaction.

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