

# Model for self-assessment of an organization's ability to achieve sustained success

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**Abstract:** *This paper aims to present a model for self-assessment to review the extent to which the organization has adopted the concepts described in ISO 9004:2018 international standard. The self-assessment is used to identify improvement and innovation opportunities, to set priorities and establish action plans, with the objective of sustained success. The output of self-assessment will show strengths and weaknesses, the related risks and opportunities for improvement, the maturity level of the organization and, if repeated, the organization's progress over time.*

**Key Words:** *self-assessment, maturity level, quality management system*

## 1. INTRODUCTION

Self-assessment can provide an overall view of the performance of an organization and the degree of maturity of its management system. It can help to identify areas for improvement and/or innovation and to determine priorities for subsequent actions. The results of an organization's self-assessment can be a valuable input into management reviews. Self-assessment also has the potential to be a learning tool, which can provide an improved overview of the organization, promote the involvement of interested parties and support the overall planning activities of the organization [1].

## 2. QUALITY MANAGEMENT SYSTEM'S MATURITY LEVEL ACCORDING TO ISO 9004:2018

The ISO 9004:2018 international standard provides guidance to help achieve sustained success for any organization in a complex, demanding and constantly changing environment, through an approach based on quality management [1]. The sustained success of an organization is achieved by its ability to meet the needs and expectations of its customers and other interested

parties, in the long term, and in a balanced way. Sustained succes can be achieved through effective management of the organization, through awareness of the organization’s environment, through learning and through the appropriate application of improvements, innovations or both. The ISO 9004:2018 international standard promotes self-assessment as an important tool for reviewing the level of maturity or success of the organization, including its leadership, strategy, management system, resources and processes, to identify areas of strenghts and weaknesses and opportunities for both improvement, and innovation [2].

A representation of the structure of ISO 9004:2018 standard, incorporating the elements essential to achieve sustained success of an organization as covered in the standard, is presented in figure 1 [1].

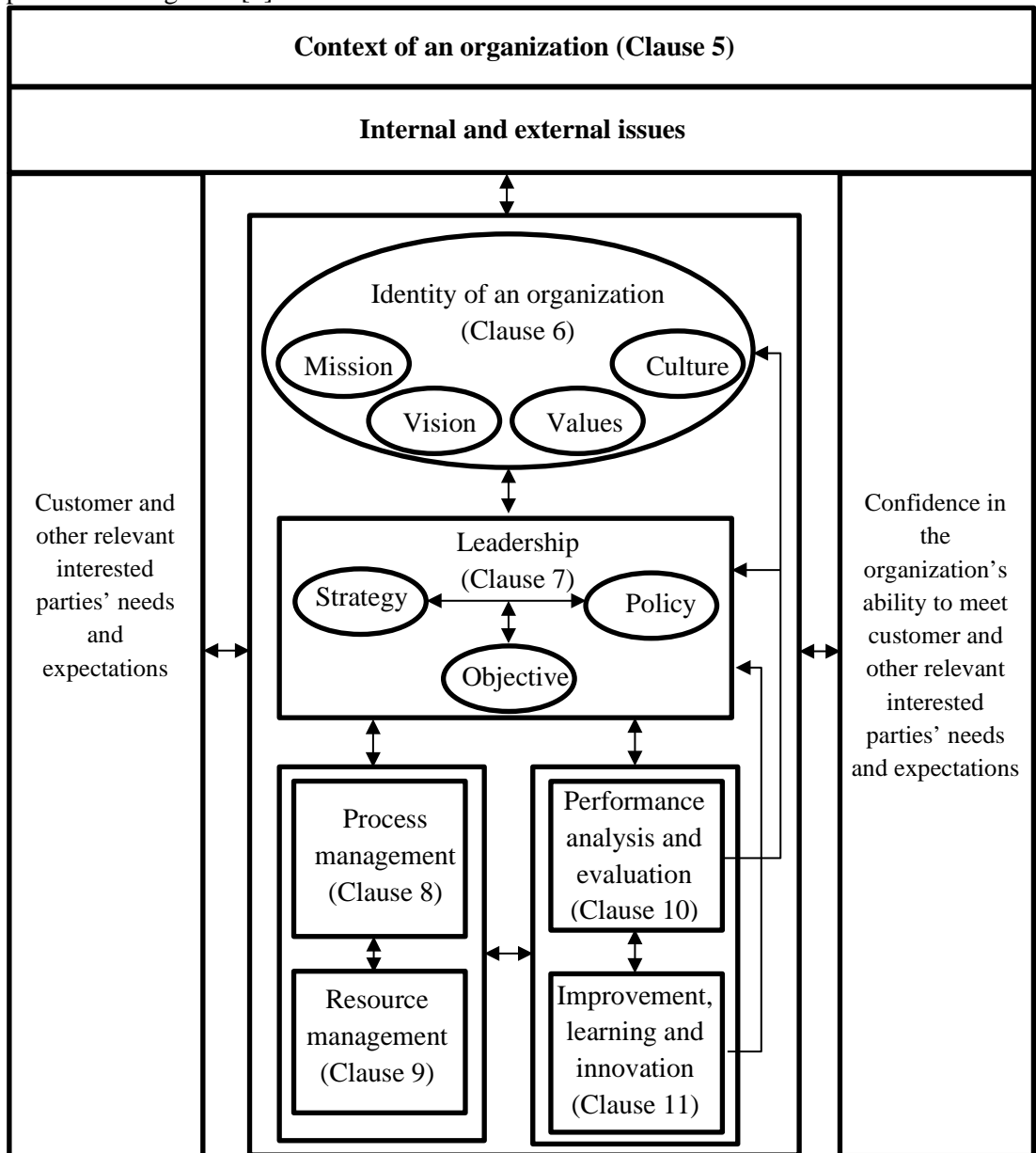


Figure 1. - Representation of the structure of ISO 9004:2018 standard [1]

The ISO 9004:2018 standard evaluates the organization based on seven clauses, whose short description is presented below.

### **2.1 Context of an organization**

The context of an organization is a process of establishing factors that influence the ability of the organization to achieve sustained success. There are three key factors to consider when establishing the context of the organization:

- the interested parties: those that can affect, be affected by, or perceive themselves to be affected by a decision or activity of the organization;
- external issues: factors that exist outside of the organization that can affect the organization's ability to achieve sustained success;
- internal issues: factors that exist within the organization itself that can affect the organization's ability to achieve sustained success.

### **2.2 Identity of an organization**

It can be said that an organization is defined by its identity and its context. Identity is established through their mission, vision, values and culture, which are interdependent:

- mission: it is the purpose of existence or reason to be of the organization;
- vision: it is the aspiration to what the organization wants to become;
- values: principles and patterns that support the mission and vision of the organization;
- culture: beliefs, behaviors and attitudes related to the identity of the organization.

It is essential that the culture of the organization be aligned with its mission, vision values which should be continually reviewed and communicated in an appropriate manner to the interested parties.

### **2.3 Leadership**

Top management, using their leadership must:

- promote the adoption of the mission, vision, values and culture in a concise and easy to understand manner in order to achieve unity of purpose;
- create an internal environment in which people are committed to achieving the objectives of the organization;
- motivate and support managers at appropriate levels to promote and maintain the unity of purpose and direction as set by senior management.

To achieve sustained success, senior management must demonstrate leadership and commitment to the entire organization in the following aspects:

- establishment of the identity of the organization;
- promotion of the culture of trust and integrity;
- establishing and maintaining teamwork;
- providing people with the resources, training and authority necessary to act responsibly;
- promoting shared values, fairness and ethical behavior for sustained success at all levels of the organization;
- establishing and maintaining an organizational structure to improve competitiveness, when applicable;
- individual and collective reinforcement of the organization values.

### **2.4 Process management**

Organizations add value through a set of connected activities within a network of processes that effectively connect generating better results.

The processes are specific to each organization and vary according to the type, size and level of maturity. The activities within each process must be determined and adapted to the size and distinctive characteristics of each organization.

It is said that an organization has process-centered management when it has established processes, with interdependencies, restrictions and shared resources.

The ISO 9004:2018 standard recommends taking into account the following aspects:

a) determination of processes

- the organization defines its processes and its interactions in order to generate the necessary outputs to meet the needs of the interested parties;
- to determine its processes, the organization must take into account the purpose of the processes, the outputs to be provided, the needs and expectations of the interested parties, changes in the market, the impact of the processes, restrictions, risks and opportunities;

b) responsibility and authority for processes;

c) management of processes.

## **2.5 Resource management**

Resources support the operation of all processes in an organization and are critical to ensure effective and efficient performance and sustained success.

The organization must determine and manage the resources necessary to achieve its objectives, taking into account the associated risks and opportunities and their possible effects.

The key resources are listed below:

- a) financial resources;
- b) people;
- c) organizational knowledge;
- d) technology;
- e) infrastructure, such as equipment, facilities, energy and utilities;
- f) environment of the organization's processes;
- g) materials needed for the provision of products and services;
- h) information;
- i) resources provided externally, including subsidiaries, partnerships and alliances;
- j) natural resources.

## **2.6 Analysis and evaluation of an organization's performance**

The organization must establish a systematic approach to collect, analyze and review the available information. Based on the results, the organization must use the information to update the understanding of its context, policies, strategy and objectives as necessary, while promoting improvement, learning and innovation activities.

The available information should include:

- the organization's performance;
- the status of internal resources and activities, understood through audits and self-assessment.
- changes in the internal and external issues of the organization as well as the expectations of the interested parties.

## **2.7 Improvement, learning and innovation**

Improvement, learning and innovation are interdependent and key aspects that contribute to the sustained success of an organization. They create inputs in products, services, processes

and management systems, and contribute to achieving desired results. The organization will experience constant change in its external and internal problems and in the needs and expectations of interested parties. Improvement, learning and innovation support the organization's ability to respond to these changes in a manner that allows it to fulfill its mission and vision, as well as supporting its achievement of sustained success [2].

According to ISO 9004:2018, a mature organization performs effectively and efficiently and achieves sustained success by:

- understanding and satisfying the needs and expectations of interested parties;
- monitoring changes in the context of the organization;
- identifying possible areas for improvement, learning and innovation;
- defining and deploying policies, strategy and objectives;
- managing its processes and resources;
- demonstrating confidence in its people, leading to increased engagement;
- establishing beneficial relationships with interested parties, such as external providers and other partners.

The self-assessment tool uses five maturity levels, which can be extended to include additional levels or otherwise customized as needed. The purposes of a step-by-step methodology for an organization to conduct a self-assessment are:

- a) to define the scope of the self-assessment in terms of the parts of the organization to be assessed and the type of the assessment, such as:
  - a self-assessment of key elements;
  - a self-assessment of detailed elements;
  - a self-assessment of detailed elements, with additional or new criteria or levels.
- b) to identify who will be responsible for the self-assessment and when it will be carried out;
- c) to determine how the self-assessment will be carried out, either by a team (cross-functional or other appropriate team) or by individuals (the appointment of a facilitator can assist the process);
- d) to identify the maturity level for each of the organization's individual processes, which should be done by:
  - comparing the present situation in the organization to the scenarios that are listed in the tables;
  - marking the elements that the organization is already applying, i.e. start at level 1 and build on progress, to attain maturity level 5 by incorporating the criteria identified in levels 3 and 4;
  - establishing the current maturity level;
- e) to consolidate the results in a report, that provides a record of progress over time and can facilitate the communication of information, both externally and internally (using graphics in such a report may contribute to the communication of the results);
- f) to assess the current performance of the organization's processes and identify areas for improvement and/or innovation (these opportunities should be identified through the self-assessment process and an action plan developed as a result of the assessment).

Table 1 gives a generic framework for setting out how performance criteria can be related to the levels of maturity in a tabular format. The organization should review its performance against the specified criteria, identify its current maturity levels, and determine its strengths and weaknesses and the related risks and opportunities for improvement. The criteria given

for the higher levels can help the organization to understand the issues it needs to consider and to determine the improvements needed to reach higher levels of maturity [1].

Table 1. – Generic model for self-assessment elements and criteria related to maturity levels [1]

Maturity level towards sustained success					
Key element	Level 1	Level 2	Level 3	Level 4	Level 5
Element 1	Criteria 1 Base level				Criteria 1 Best practice
Element 2	Criteria 2 Base level				Criteria 2 Best practice
Element 3	Criteria 3 Base level				Criteria 3 Best practice

The self-assessment is intended to be performed by process owners and managers at all levels to obtain an in-depth overview of the organization and its current performance.

The elements of the self-assessment are shown in tables A.2 to A.32 from ISO 9004:2018 standard, annex A; however, the organization can define additional or different criteria to fulfil its own specific needs. If appropriate, the self-assessment can be limited to any of the tables A.2 to A.32, in isolation [1]. To determine the current maturity level, an Excel workbook was developed, which allows quick calculation and plotting graphs necessary to interpret the results. The Excel workbook contains 31 subclauses [3].

	A	B	C	D	E	F	G	H	I
				Maturity level					
	Subclause	Level 1	Level 2	Level 3	Level 4	Level 5		Actual score	Target
3									
4	5.2. Relevant interested parties	The interested parties are determined, including their needs and expectations and whether the associated risks and opportunities are informal or ad hoc.	Processes to meet the needs of some interested parties are established.   Ongoing relationships with interested parties are established as informal or ad hoc.	Processes for determining which interested parties are relevant are in place.   Processes for determining the relevance of interested parties include consideration of those that are a risk to sustained success if their needs and expectations are not met and those that can provide opportunities to enhance sustained success.   The needs and expectations of the relevant interested parties are identified.   Processes to fulfil the needs and expectations of the interested parties are established.	Processes for assessing the relevance of the needs and expectations for relevant interested parties are in place and are used to determine which ones need to be addressed.   The needs and expectations of key interested parties are addressed and reviewed such that improved performance, common understanding of objectives and values, and enhanced stability have been realized in some of these ongoing relationships.	Processes and relationships with relevant interested parties are fulfilled according to the relevant needs and expectations determined. This has been done as part of understanding the benefits, risks and opportunities of ongoing relationships.   The needs and expectations of all relevant interested parties are addressed, analysed, evaluated and reviewed, such that there is improved and sustained performance, common understanding of objectives and values, and enhanced stability, including recognition of the benefits derived from these ongoing relationships.		2	3
5	5.3. External and internal issues	Processes for determining and addressing external and internal issues are informal or ad hoc.	Processes for determining and addressing issues are in place.   The risks and opportunities related to the issues identified are determined as informal or ad hoc.	Processes to determine internal issues that can affect the organization's ability to achieve sustained success are identified.   Processes to determine external issues that can affect the organization's ability to achieve sustained success are identified.	External and internal issues are determined and show consideration for factors such as statutory, regulatory and sector specific requirements, globalization, innovation, activities and associated processes, strategy and levels of competence and organizational knowledge.   Risks and opportunities are determined, and show consideration for information from the organization's past and its current situation.   Processes to address issues considered to be risks to sustained success, or opportunities to enhance sustained success, are established, implemented and maintained.	Processes for the ongoing monitoring, reviewing and evaluation of external and internal issues are established, implemented and maintained, with actions arising from this process acted on.		2	3

Figure 2. – Self-assessment of the detailed elements of clause 5, context of an organization, adaptation after [1]

Table 2 contains the results of self-assessment of a specific organization.

Table 2. - Self-assessment of an organization's ability to achieve sustained success [2]

Clause	Subclause	Level of maturity					Conclusion Results/ comment
		1	2	3	4	5	
5. Context of an organization	5.2. Relevant interested parties		2				2
	5.3. External and internal issues		2				
6. Identity of an organization	6.2. Mission, vision, values and culture			3			3
7. Leadership	7.1. General		2				2
	7.2. Policy and strategy		2				
	7.3. Objectives		2				
	7.4. Communication		2				
8. Process management	8.1. General			3			2,33
	8.2. Determination of processes			3			
	8.3. Process responsibility and authority		2				
	8.4.1. Managing processes (managing alignment/linkage between the processes)		2				
	8.4.2. Managing processes (attaining a higher level of performance)		2				
	8.4.3. Managing processes (maintaining the level attained)		2				
9. Resource management	9.1. General			3			2,14
	9.2. People		2				
	9.3. Organizational knowledge		2				
	9.4. Technology		2				
	9.5. Infrastructure and work environment		2				
	9.6. Externally provided resources		2				
	9.7. Natural resources		2				
10. Analysis and evaluation of an organization's performance	10.1. General		2				2
	10.2. Performance indicators		2				
	10.3. Performance analysis		2				
	10.4. Performance evaluation		2				
	10.5. Internal audit		2				
	10.6. Self-assessment		2				
	10.7. Reviews		2				
11. Improvement, learning and innovation	11.1. General		2				2,25
	11.2. Improvement		2				
	11.3. Learning			3			
	11.4. Innovation		2				

The obtained results are illustrated in figure 2.

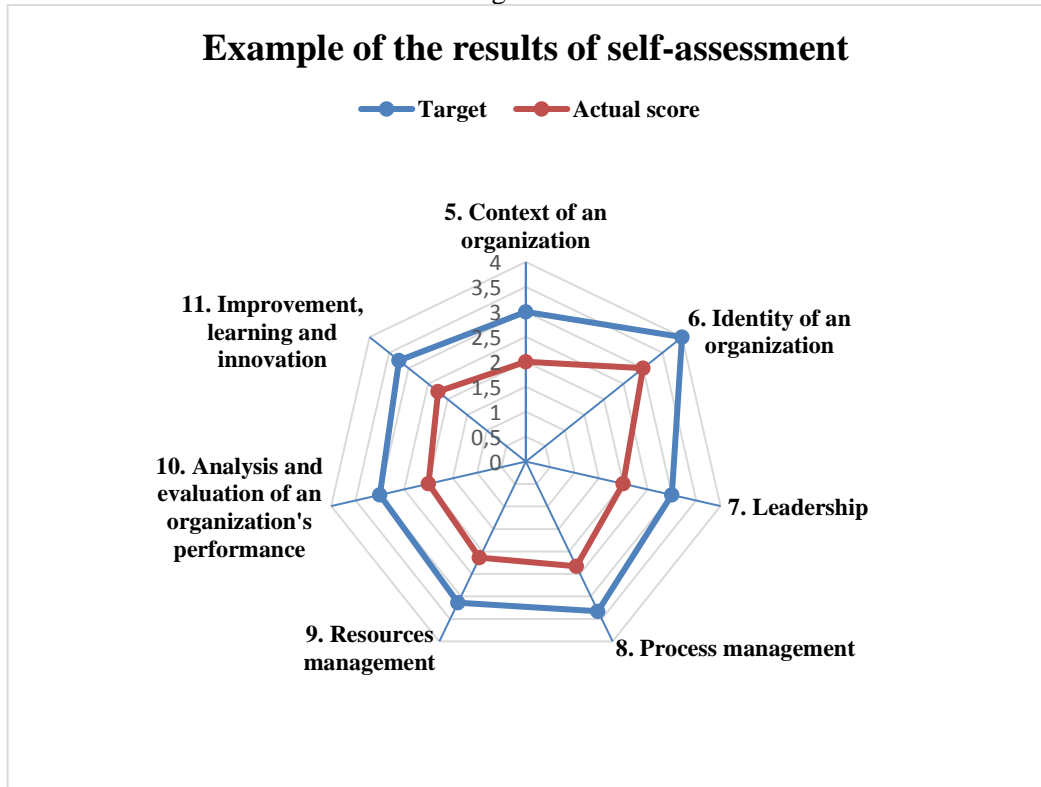


Figure 3. – Example of the results of self-assessment

From this first self-assessment results, it can be seen that the weakness points of that organization are:

- context of an organization;
- leadership;
- analysis and evaluation of an organization's performance.

The strengths, at the moment of the self-assessment seem to be the process management.

As a result, the management should review the strategy and develop a plan to improve the situation regarding the weakness points. To ensure that the improvement plan is effective, it is necessary to identify and adequately analyze and describe the processes involved and the sequence and interactions between them [3].

### 3. CONCLUSIONS

The organization's performance should be comprehensively analysed to identify potential strengths to be fostered with regard to the organization's leadership activities, as well as weakness in the organization's leadership roles and activities [1].

In this article, the results of self-assessment carried out for an organization, using ISO 9004:2018 standard are presented. The elements of the self-assessment are presented in tables A.2 to A.32, from annex A. In order to obtain an improvement of the organization's overall performance, this self-assessment should be performed at planned intervals. The results allow the identification of the weakness points and the development of medium-term strategy of the organization [3].



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