

RISK MANAGEMENT, CONFORMITY ASSESSMENT, AND EVALUATION OF ORGANIZATIONAL INTELLIGENCE IN SCENARIOS OF CHANGE AND CRISIS

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Introduction

Is it possible to have confidence in the validity of conformity assessment, even when its object is rapidly changing? How can the ability of organizations to ensure the fulfillment of requirements be appraised in the presence of structural and traumatic crises, nowadays inevitable components of the broader context? How is it possible to reconcile the goal of performance assurance (for example, “quality assurance”) with the concept of risk, and with that of its associated uncertainty? How should assessment tools evolve to match the growing complexity of the object activities?

The following considerations arise from these questions with the intention of contributing to the search for the right answers. First, to this end, the topic of “organizational intelligence” will be addressed. Subsequently, we will focus on the evolution in the sense of performance of the rules on management systems, and on risk management as a countermeasure to the progressive abandonment of the prescriptive approach. Finally, the idea of a “complexity assessment” will be proposed, aimed at assessing not only compliance with the requirements in a stable and predictable framework, but also the adaptability and resilience of organizations in the face of change and crisis.

Organizations and Context Transformation

Organizations are complex adaptive systems. Considering the sometimes-disruptive variations of the conditions that characterize their context, they will become increasingly able to regularly provide outputs conforming to the requirements and to deal advantageously with this variability.

To achieve this, organizations should possess, to the necessary degree:

1. An up-to-date knowledge of the framework of requirements, resulting from monitoring the expectations and requirements of the most critical and important interested parties, and of their evolution.
2. A clear understanding of the risks and opportunities associated with both the routine management of processes and their change, when necessary.

For the realities characterized by the unpredictability of the scenario, the risk-based approach and the adoption of tools to maximize the rationality of decisions will be decisive.

The management system will be more useful and effective the better it can regulate on this basis the organizational reactions in unforeseen events and crises.

Operationally, a management system should include tools for:

1. The management of the consolidated part of the processes (for example, procedures for the routine management of infrastructures, or for the control of typical courses of action).
2. Detecting changes in the context, both internal and external (for example, those necessary to monitor the evolution of requirements and expectations, or to promptly recognize and evaluate unexpected situations).
3. Making decisions and for carrying out consequent actions in the face of non-routine and unforeseen events, emergencies, etc.

In other words, an organization should be able to respond in a coherent way to the evolution and changes to the context, to the extent that it can demonstrate:

Diligence in applying the rules governing the predictable and stable components of the processes.

Attention to the scenario, to rapidly identify changes.

Ability to adapt its course of action readily and effectively, in the face of the variations.

Added to these "virtues," which are essential in a "physiologically" changing context, is one that is indispensable for dealing with any crisis scenarios: the transformative capacity, that is, an organization's ability to apply drastic and immediate changes when new, unpredictable, and even traumatic circumstances occur in the business environment.

The adaptability and transformative capacity of an organization will involve creativity, as an aptitude for elaborating original solutions, and could be summed up in the unifying concept of "organizational intelligence."

The New Performance Approach and Risk-based Thinking in Management System Standards

It is well known that the management of an organization is enhanced if it is based on tested and recognized models, such as those codified by the rules on management systems. They do not introduce new solutions for organizational management compared to the consolidated framework of business management tools, but instead establish a structured system of requirements, the application of which can help organizations to implement these tools regularly and with a view to continuous improvement, and to demonstrate their effective and regular application externally.

Given the changeable nature of the "ecosystem" mentioned above, the latest generation standards on management systems, including those for the accreditation of Conformity Assessment Bodies, require organizations, more than in the past, to contextualize their management system and to define the rules of organizational behaviour.

The validity of the management system standards in supporting the definition and effective implementation of policies, and the achievement of objectives, today lies precisely in their reduced prescriptiveness, and therefore in their “unspoken” attributes (i.e., those spaces not covered by requirements, which the users of the standards themselves can fill). Therefore, there is less rigidity of the requirements and greater freedom on the part of organizations in designing and establishing their own specific management system. This enhanced freedom, however, must be supported by:

- Greater managerial competence, to respond to the request for a more evolved planning capacity.
- Greater responsibility of organizations in guaranteeing the effectiveness of the “self-regulation” process and in demonstrating, internally and externally, the suitability of the “self-defined” requirements.

It will be possible to demonstrate if each of the solutions identified by the organizations — within the new and wider margins of discretion mentioned above — will emerge as the result of a logical, traceable path, along which both the inputs taken as the basis for each decision and the understanding of the possible consequences will result from a correct management of the risk.

All this implies a “cultural” transformation, which the definition of “risk-based thinking” used by ISO 9001:2015 and taken up as part of the ISO 17000¹ series standards, effectively summarizes.

The adoption of risk-based thinking will serve not only to build, apply, and improve a management system aimed at the result, but also to make the logical process that generated it feasible, enabling effective conformity assessment.

Regarding the way to apply risk-based thinking, the standards in question (in line with the new performance approach) do not provide specific solutions. In general, simple, small-size organizations with consolidated technologies, characterized by a stable/predictable external/internal context, will not need sophisticated tools to put risk-based thinking into practice. Instead, in larger and more complex organizations its implementation should be more structured and will involve the implementation of specific methods, tools, and skills. For them, the main normative reference to systematically address risk management is found in the standards developed by the ISO/TC 262 Technical Committee, particularly in the following:

- ISO 31000 - Risk management – Guidelines
- IEC 31010 - Risk management - Risk assessment techniques
- ISO 31050 - Guidance for managing emerging risks to enhance resilience (currently under development)

¹ See ISO 9001:2015 - Quality Management Systems - requirements.

A.4 Risk-based thinking: “... The risk-based thinking applied in this International Standard has enabled some reduction in prescriptive requirements and their replacement by performance-based requirements. There is greater flexibility than in ISO 9001:2008 in the requirements for processes, documented information, and organizational responsibilities.” See EN ISO/IEC 17025, December 2017 - General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2017 - Foreword): “...This third edition cancels and replaces the second edition (ISO/IEC 17025:2005), which has been technically revised. The main changes compared to the previous edition are as follows:

- the risk-based thinking applied in this edition has enabled some reduction in prescriptive requirements and their replacement by performance-based requirements;
- there is greater flexibility than in the previous edition in the requirements for processes, procedures, documented information and organizational responsibilities; ...”.

Conformity Assessment in the scenarios of change and crisis

As an essential part of the conformity assessment, the new emphasis on the evolution of management systems requires assessment processes capable of providing a reliable estimate of the organization's ability to maintain and increase the performance of its management system amid changing conditions.

In addition to the ability to apply the requirements and to improve continuously, depending on the changes in the context and the framework of expectations, the organization should demonstrate the following conditions:

- **The capacity to innovate**, when the context and the framework of expectations require alternative propositions of product/service, or rethinking of processes (for example, to increase the chances of success in a competitive context).
- **The capacity for transformation**, in the event of radical changes in the context and in the requirement framework that oblige the organization to rethink/modify itself (for example, in the presence of a crisis or structural changes in the scenario).

Thus, the assessment should include an appraisal of these capacities, i.e., an assessment of the organization's "intelligence," as well as its "diligence." This is a task that is difficult to perform using metrics, and which, due to having high- complexity systems as its object, cannot in general be based on a purely deterministic approach. The assessment of the "new" management systems, and of future ones already emerging in the debate on possible revisions of the applicable ISO standards², will require the assessor to have a growing ability to understand and critically examine organizational behaviour, allowing for the consideration of whether it responds primarily to criteria of rationality and reasonableness, including behaviours in place to effectively react to any (now widely experienced) economic, health, geopolitical, climatic, energy, etc. crisis scenarios. This will enable the formulation of reliable judgments on the resilience and transformation capacity of the organization under assessment.

Based on this increased capacity, the assessment must consist of a valid logical and socio-technical analysis of the management system and, consistent with the criteria of risk-based thinking, carefully examine the objective reasons for organizational decisions before their implementation. The key question of the assessor must be: "Why?" Only after having obtained objectively valid answers on a logical and technical level will the assessor be able to proceed with the search for evidence of a regular and effective application of decisions.

This "leap in complexity" will make the performance of the assessment less feasible through the accurate application of pre-established protocols, thereby increasing the possibility that its essential objective (providing a valid measure of the state of the management system) may not be reached. In other words, with the new "performance" approach and with the pressure of crisis scenarios, the "uncertainty" associated with the outcome of the assessment could grow.

² See the works of the Technical Group ISO/TC 176/TG04 "Emerging trends in quality" and the current debate in the same area on the topic "Quality 4.0."

To reduce this uncertainty and the associated risk that the assessment itself will not generate “value” or worse, produce misleading information (similar to management systems that must apply the logic of risk), we should deal with the increased danger that the result of the assessment does not correspond to the actual state of conformity of the “measurand.”³ To this end, the components of this uncertainty will be identified, as for any measurement process, and the right countermeasures for its containment within acceptable limits will be implemented. Among them, the assessment process will need to be based on greater “evaluative intelligence” (meaning, among other things, the ability of the assessors to use their logical-deductive skills in understanding the complexity of the organization and its context, and in the assessment of decision-making processes, from the strategic to the operative level); and greater technical-managerial competence of the assessors. Since the need for higher performance on the part of the assessment team is less easily met by drawing on the knowledge of only one or a few assessors, a more frequent and broader involvement of specialists and interested parties in support of the team should be taken into consideration.

This should be part of a more interdisciplinary, dynamic, and inclusive approach to the entire management of the assessment program, as a basis for a conformity assessment that is itself adaptive and always responsive to the increasing complexity of its object tasks.

Figure 1 summarizes and aims to detail the assessment scenario, highlighting the needs for change deriving from the context according to: an increasing order of complexity; the corresponding qualities that an “adaptive” organization must have to satisfy these needs; the results deriving from the application of these skills; and the list (simplified and not exhaustive) of the corresponding areas of focus of the assessment. It should be noted that this is a broad outline scheme, presented with the aim of illustrating more clearly the functional relationship between some of the main concepts described up to now.



Figure 1. Relations between context needs, organizational answers and focus areas of the assessment

³ Ref. International Vocabulary of Metrology — Basic and general concepts and associated terms (VIM). Third Edition 2008: 2.3 (2.6) measurand: quantity intended to be measured.

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