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Fakultät IV
Wirtschaft und
Informatik

Management
Nr. 12

Integrated Risk and Opportunity Management

Implementing clause 6.1

Patricia A. Adam

Whitepaper, Preprint Version, 2024

Zusammenfassung/Abstract

Integrated Risk and Opportunity Management (IROM) goes far beyond what is found in organizations today. However, it offers the best opportunity not only to keep pace with the VUCA world, but to actually profit from it. Accordingly, the introduction of opportunity-based thinking in addition to risk-based thinking is part of the design specification for ISO 9000 and ISO 9001. The prerequisite for the successful design of an IROM is the individual definition, control and integration of risk and opportunity management processes, considering eight success factors, the "8 C". Top management benefits directly from the result: better, coordinated decision memos enable faster and more appropriate decisions.

Adam, Patricia A.
Integrated Risk and Opportunity Management - Implementing clause 6.1 – Hannover: Hochschule Hannover, 2024 (Management; Nr. 12). Whitepaper, Preprint Version.
[Original published by DQS GmbH, www.dqsglobal.com]

ISSN: **2626-4889**
DOI: **10.25968/opus-3083**
URN: **urn:nbn:de:bsz:960-opus4-30839**

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Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über https://portal.dnb.de abrufbar.

Impressum
Herausgegeben von Prof. Dr. Patricia A. Adam, Professur für Allgemeine Betriebswirtschaftslehre, insbesondere International Management
c/o Hochschule Hannover, Fakultät IV – Abteilung Betriebswirtschaft,
Ricklinger Stadtweg 120, 30459 Hannover

Management Summary

Integrated Risk and Opportunity Management (IROM) goes far beyond what is found in organizations today. However, it offers the best opportunity not only to keep pace with the VUCA* world, but to actually profit from it. Accordingly, the introduction of opportunity-based thinking in addition to risk-based thinking is part of the design specification for ISO 9000 and ISO 9001. The prerequisite for the successful design of an IROM is the individual definition, control and integration of risk and opportunity management processes, considering eight success factors, the "8 C". Top management benefits directly from the result: better, coordinated decision memos enable faster and more appropriate decisions.

**The VUCA model describes the changes in today's world. The acronym VUCA stands for Volatility, Uncertainty, Complexity and Ambiguity*

Contents

How to win in the VUCA world

The complex, ever-changing, and often disruptive VUCA world continues to pose significant challenges for organizations. The acronym VUCA stands for a world in which precise planning is no longer possible because it is characterized by Volatility, Uncertainty, Complexity and Ambiguity. An organization confronted with the VUCA world is forced to become more flexible. May be, that it has to design its internal processes differently because it can no longer rely on controlled conditions. May be, that the changes in the environment put pressure on margins, trigger significant change processes in the organization, or even challenge the business model altogether.

The speed of these changes and the variety of relevant issues are enormous and can quickly escalate into crises. Managing the consequences of these changes is therefore of vital importance. Accordingly, dealing with risks and opportunities is an indispensable part of business activities and is an obligatory aspect of all relevant ISO management system standards since the introduction of the High Level Structure (now: Harmonized Structure) under clause 6.1 "Actions to address risks and opportunities".

In this context, a purely formalistic approach is not sufficient. In order to establish appropriate processes and structures, the objective itself must be critically examined. In 2012, Nassim Taleb developed the concept of antifragility (“Antifragile – things that gain from disorder”). He argued that, contrary to the conventional view, robustness or resilience should not be seen as the natural opposite of fragility, i.e. (over-) sensitivity to change and disruption. Fragile systems break down in VUCA situations. Robust or resilient systems strive to be unaffected by situational changes, i.e. to remain unchanged. To this end, ISO 31073:2022, 3.3.39 also defines resilience as the adaptive capacity of an organization in a complex and changing environment. It achieves this by having the ability to prevent adverse effects caused by an event or to return to an acceptable level of performance within a reasonable period of time.

The concept of antifragility goes far beyond this notion. According to Nassim Taleb, antifragile systems not only manage to bounce back in such VUCA situations. They even improve and outperform the status quo - in other words, win (Illustration 1). This idea has been enthusiastically embraced by the professional community. In many publications, the term "resilience" has been expanded to include the component of antifragility, so that resilience also includes the requirement not only to remain unchanged in difficult environments, but also to be able to adapt dynamically and successfully.

Illustration 1: (Risk) Triad according to Nassim Taleb

Regardless of what term is used to describe the idea of “winning” in the VUCA world: More than ten years after its first publication, it has still not been systematically translated into practical management. This may be due to the fact that publications on the subject tend to be philosophical in nature, with little in the way of directly implementable actions. But one thing is clear: if we want to become antifragile, we need to rethink risks and opportunities. This insight is also beginning to gain acceptance in the standardization community.

Opportunity-based thinking in the discussion of ISO management standards

Since the beginning of 2023, various “Emerging Topics” Task Groups have been discussing ideas for a possible revision of ISO 9000 and ISO 9001. As a result, TG 4 "Risk" presented in October a highly regarded internal "Risk concept paper", in which risk-based thinking (ISO 9001:2015, A.4) is complemented by opportunity-based thinking. Illustration 2 shows the simplified and somewhat abstract model developed in this paper. It argues that any change results in an organization having to evaluate it for itself and deal with the resulting opportunities and risks. Risk-based thinking (as described in ISO 9000:2015, 3.7.9 and ISO 31000:2018, among others) is typically based on evaluating events with regard to their consequences and likelihood of occurrence in order to take mitigating actions. Opportunity-based thinking, on the other hand, would typically explore existing capabilities, competencies, and capacities to ultimately identify actions that allow to take advantage of identified opportunities. While improvements can be achieved through the successful implementation of both types of actions, their fundamental orientation is very different. Psychological factors also play a role here, which may lead to the fact that, for example, seizing an opportunity is viewed much more positively (and is thus more quickly approved) than dealing with a risk or error.

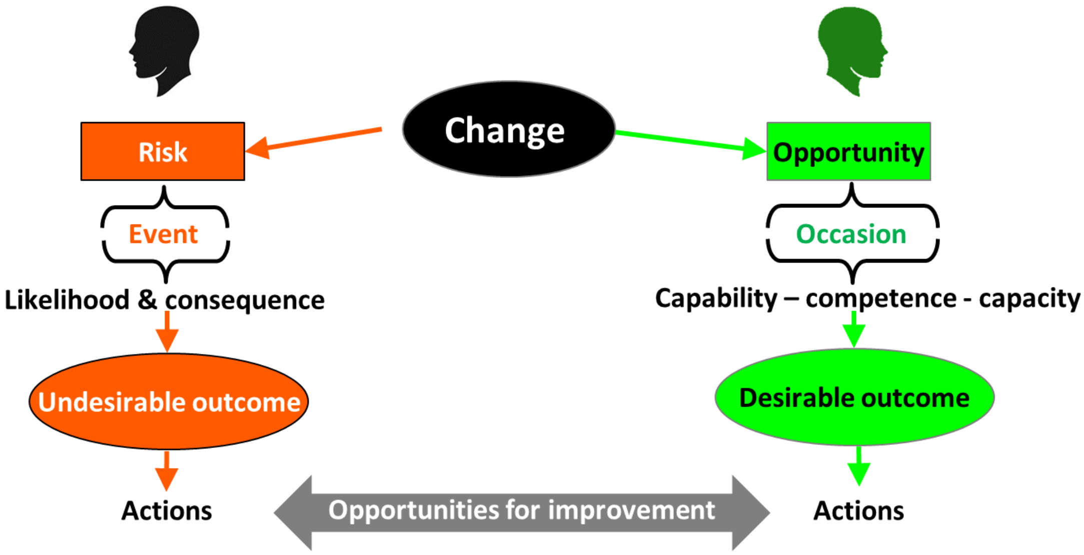

Illustration 2: Risk-based and opportunity-based thinking in change

The revision of ISO 9001 and ISO 9000 has just begun. The design specification for the revision explicitly includes the consideration of risks and opportunities as a concept for dealing with change and the proposal to decouple risk-based and opportunity-based thinking. It remains to be seen whether this concept will prevail and be included in the new versions of the standards.

„Risk 2.0": A research project funded by DQS

The author initiated the DQS-funded research project "Risk 2.0" in 2022 with the aim of exploring the possibilities, pitfalls and experiences of an antifragile approach to the VUCA world in order to utilize antifragility in management systems. The project was carried out in 2023. For this purpose, a comprehensive literature review was supplemented by qualitative interviews with top and middle managers, risk managers, external auditors and other experts from organizations of different industries and sizes. Illustration 3 below provides an overview.

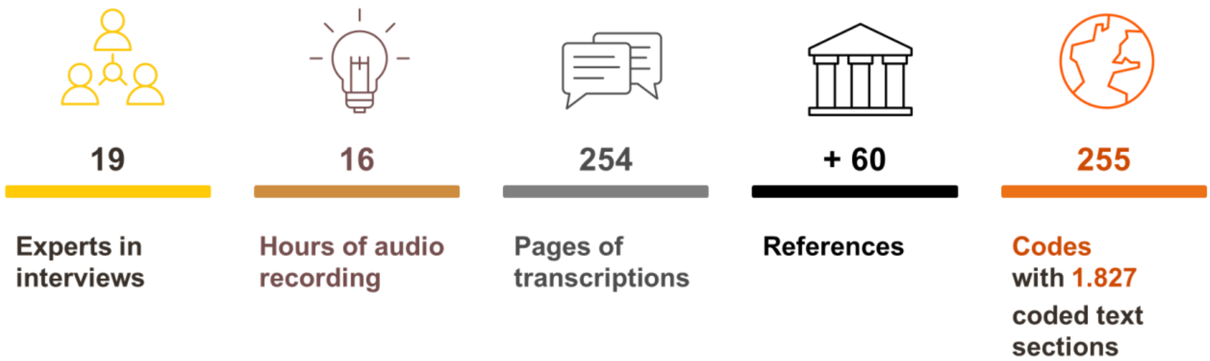

Illustration 3: Research project „Risk 2.0“ in numbers

The project’s key results can be summarized in the following findings:

- Opportunity Management is not "Risk Management with an O“
- Antifragility is a top management task
- No antifragility without Integrated Risk and Opportunity Management (IROM)
- Three challenges threaten integration
- A successful IROM follows the “8 C“
- A management approach in 3D facilitates integration

Opportunity management is not "risk management with an O”

The understanding of risk and opportunity is very inconsistent. In the literature there is a broad understanding of risk as the effect of uncertainty, which is also reflected in ISO definitions, e.g. in ISO 9000:2015, 3.7.9. This view includes both negative and positive deviations from the expected. Thus, the term opportunity describing a positive effect is rendered obsolete. From a mathematical point of view, this comprehensive definition of risk is quite meaningful, because modeling probabilities simultaneously represents possible negative and positive developments. Consequently, there is only one risk management process in ISO 31000:2018.

Unfortunately, though, this definition leads to undesirable developments in the practical design of risk management. The focus here (as in the safety-related standards) is on the negative effects. Even in the current risk management literature, the focus is almost exclusively on dealing with threats, i.e. sources of danger or damage - despite using a broad definition of risk. Although ISO 9001:2015 recognizes the need to consider opportunities in clause 6.1 of the standard, the term opportunity is not defined independently.

The practical management of risk, however, continues to be driven by the need to eliminate existing uncertainty. The goal is to safeguard that a system or process can continue to perform at a constant level when a threat manifests itself. This should achieve robustness, or resilience in a narrow sense. However, disruptive change cannot be countered with this attitude, as the solution to the resulting problems requires the scrutiny of the core of the business model and thus an innovative and creative attitude.

In practice, this actually means that there is no systematic opportunity management - a view shared by the experts surveyed. Instead, there are individual departments, typically corporate development or innovation management, that assume these kinds of tasks that are important for the future.

If an organization wants to address both aspects equally, it must first abandon the idea that risks and opportunities arise from the same processes (see Illustration 4). A typical risk management process consists of the sequential steps of identify - analyze - evaluate - treat. The analysis tools used are very methodical and mathematical in nature. As a result, people with a strong affinity for numbers often work in risk management.

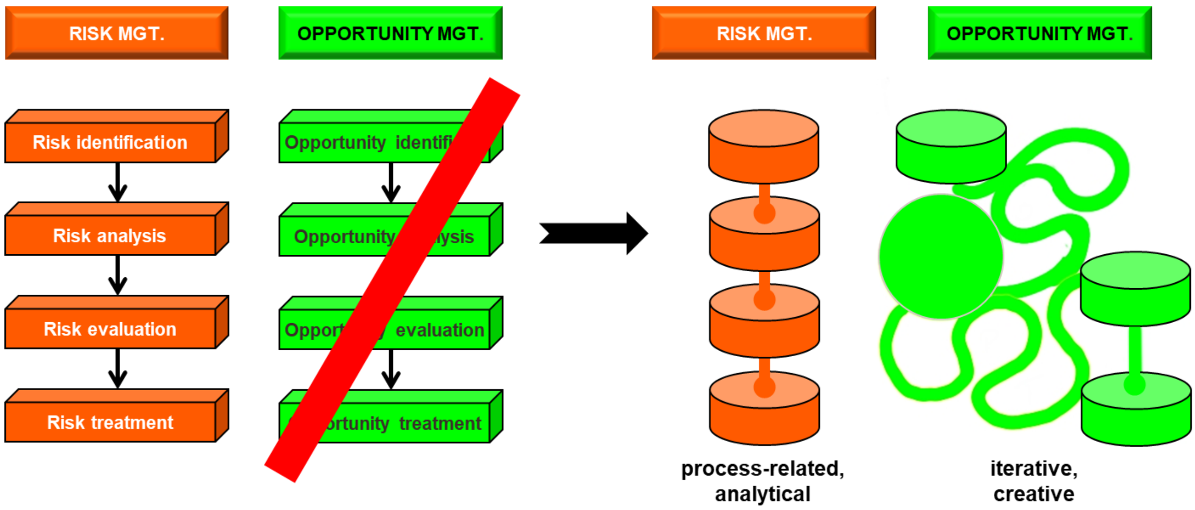

Illustration 4: Typical processes in risk and opportunity management

Effective opportunity management processes, on the other hand, are more creative in nature, because the goal is to develop innovative solutions. After identification, a classical opportunity management process would enter an analysis phase, which proceeds in iterative loops, analogous to a typical design thinking approach. Only after this analysis phase has been successfully completed would the overall view of the opportunity evaluation and the specific derivation of actions follow.

Accordingly, people working in opportunity management tend to be innovative, solution-oriented creatives with a strong team orientation. As a result, they rather see themselves as the antithesis of their colleagues in risk and quality management. This, in turn, means that communication channels between the two parties rarely develop outside of the formally established ones. In practice, actions dealing with risks and opportunities usually end up at the top management level for decision making without prior coordination.

Antifragility is a top management task

Nassim Taleb is an established expert in risk management since 2007, thanks to his mathematical and philosophical approach, which, among other things, made the idea of "black swans" famous. As a result, his ideas on antifragility are widely discussed in risk management circles. So far, though, they have rarely been applied in practice.

Taking a critical look at a meaningful approach to achieving organizational antifragility, it becomes clear that the triad of fragile - resilient - antifragile developed by Taleb is not part of the usual design of risk management. While risk management is primarily responsible for protecting the organization from threats, i.e. it must strive for resilience in the narrower sense, opportunity management is required to identify and establish aspects of winning.

Antifragility is therefore an objective that can only be achieved through the optimal interplay of identifying and exploiting risks and opportunities. It therefore belongs at top management level. This is the (only) place where decisions on strategic risks and opportunities converge, as is stated, for example, in clause 7.2 of ISO 9004:2018.

The more complex the context and the organization, the more difficult it is for top management to properly balance risks and opportunities. However, if risk and opportunity management are not linked directly, there is no consideration of the other perspective in advance and thus no reasonable prior coordination. This means that only top management has the opportunity to identify contradictions and resolve them in favor of one of the parties. It is not uncommon for this to be done at random or on a gut feeling, as there is a lack of time and detailed knowledge to thoroughly review the previous analyses.

In smaller owner-managed organizations, there is usually only one managing director, meaning that an examination of the risks and opportunities from different perspectives remains undone. Under these circumstances, a managing director with a strong entrepreneurial mindset would always choose business opportunities over risks. Ultimately, this would not only severely limit the effectiveness of risk management, but also contradict the principle of fact-based decision making. This is not an effective approach to achieve antifragility.

No antifragility without Integrated Risk and Opportunity Management (IROM)

Top management can only make good decisions if risk and opportunity management processes are integrated. Integrated in such a way, that all relevant aspects have already been critically examined and any contradictions resolved or at least presented in a comprehensible manner before they are considered. Accordingly, it would be necessary to include opposing viewpoints at least in the identification and analysis of individual risks and opportunities, as well as in the design of actions, before decisions are made. For this purpose, appropriate communication channels should be established.

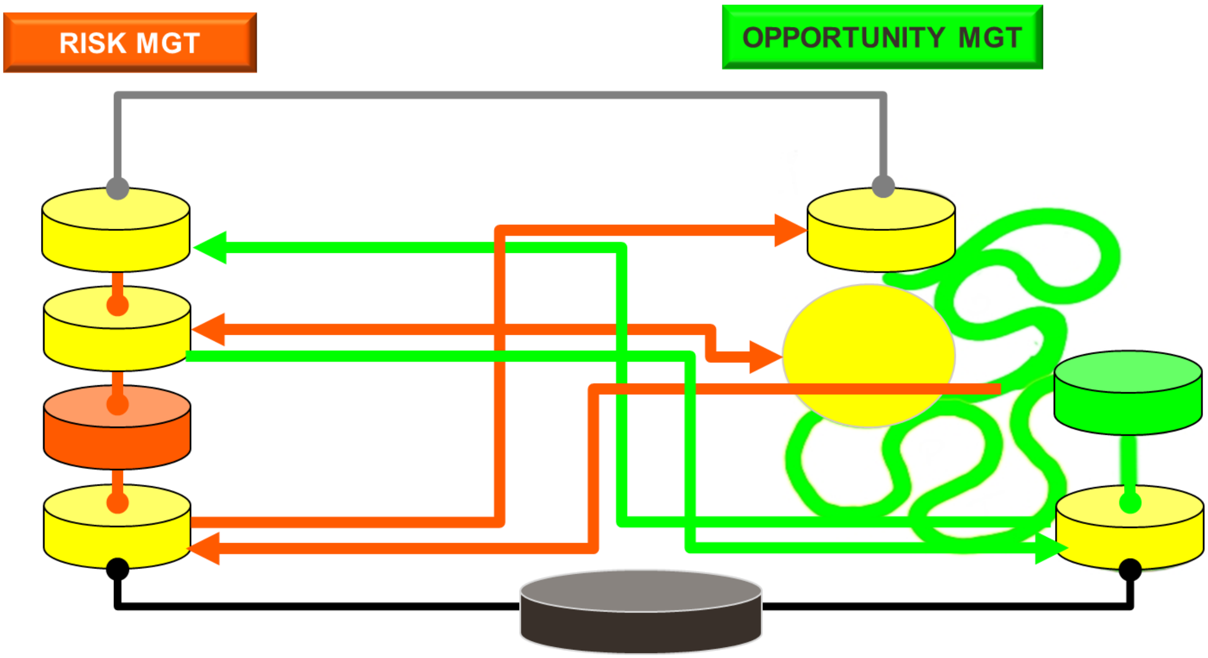

Illustration 5: IROM — integrated in many ways

A realistic view of risks and opportunities in the VUCA world also requires that events are analysed and discussed from different perspectives. For a good IROM, it is therefore advisable to use multi-perspective teams with a diverse composition in the above-mentioned process steps - at least when considering new and complex risks and opportunities. This could include for example members from different areas of the company who reflect on the VUCA problems from their expertise with different experiences and viewpoints. In contrast, the overarching evaluation phase including the preparation of the respective portfolios focuses more on the particular technical expertise. In Illustration 5, these multi-perspective teams, which are usually assembled specifically for individual cases, are shown in yellow.

Three challenges threaten integration

The complexity that arises in an IROM creates typical challenges that can only be overcome with a well-directed design and corresponding commitment (see Illustration 6). The first challenge is to encourage risk as well as opportunity management departments, which in many organizations tend to be critical of each other, to openly collaborate. This will work only, if risk and opportunity management are not competing for resources and instead share a common understanding of the benefits of working together. Because of the very different personalities and cultures of the departments involved, this will not happen naturally, but must be specifically encouraged and supported by top management and executives. In some organizations, this will also require a cultural change that will only take effect in the longer term. In addition, the members of multi-perspective teams must first become familiar with the different ways of thinking and solving problems, which is the second challenge. It is important to understand that this kind of diversity stimulates debate and often prolongs the solution process. However, it is exactly this controversy that creates value in the VUCA world.

Illustration 6: Integration Challenges

Discharging members from all departments on an ad-hoc basis for multi-perspective teams must be considered in capacity planning. This third challenge applies particularly to highly experienced experts, who are already a scarce resource. It is quite likely that 20% or more of the respective employee capacities will be required. An IROM therefore represents a considerable investment in the sustainability of the organization. This cannot be ensured by a simple directive, but requires instead a permanent allocation of the necessary resources. However, if top management is not prepared to make this investment, it is punishing itself with uncoordinated and therefore generally incomplete decision memos, a considerable amount of effort to reconcile the contradictory proposals, and ultimately poorer results.

A successful IROM follows the "8 C“

The various success factors for establishing an IROM can be summarized in the "8 C" (see Illustration 7). The first five “C" are the success factors for integrating risk and opportunity management processes. The remaining three “C" address the design of the framework.

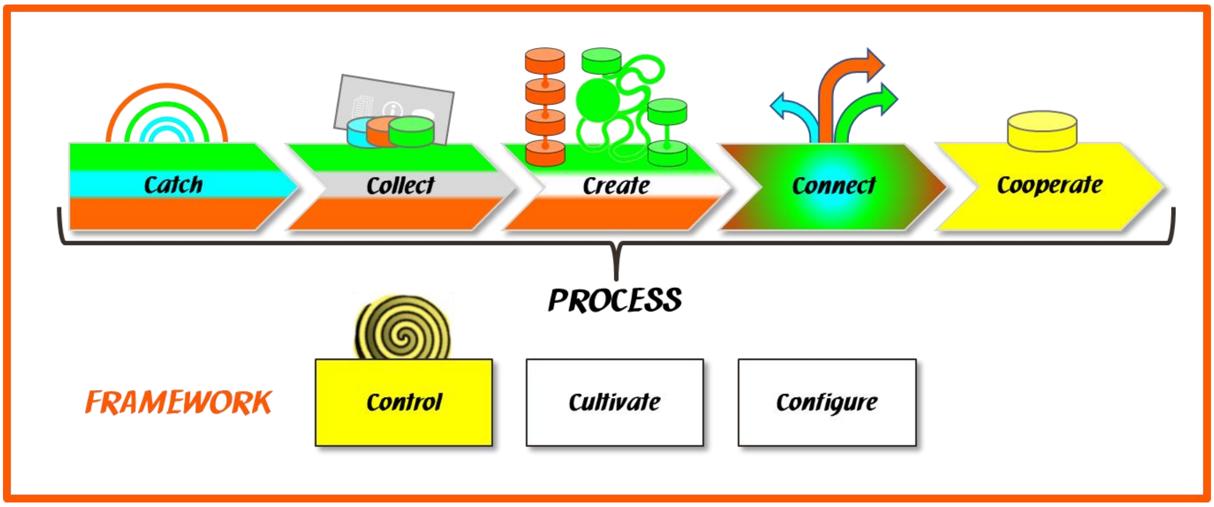

Illustration 7: IROM Success Factors – 8 C

C1. Catch changes concerning context, customers and stakeholders
Changes in the environment must be identified at an early stage. Only this ensures that there is enough time to fully run through the risk and opportunity management processes and to effectively implement the actions identified. It is therefore important that all affected units set up early warning systems: Risk management, opportunity management, and the core process (shown here in blue). The more data is collected, relevant information is filtered, and critical developments are identified, the more likely it is that material risks and opportunities will not be overlooked. This includes detecting anomalies (e.g. a certain customer group suddenly behaving differently) and identifying critical dependencies. The initial goal is to record the occurrence of such anomalies, not to identify the reasons for them. The analysis of causalities will not become relevant until later.

C2. Collect information
Each business unit typically collects its own information. As a result, there is a danger that for example risk management analyses information and declares it as irrelevant, without considering that it may still contain evidence for generating opportunities. It would therefore be important to create a "marketplace" within the organization where all departments can contribute information as well as extract it. A meaningful marketplace goes far beyond a mere database, but also includes regular face-to-face interaction across departmental boundaries to interpret data and find solutions.

C3. Create risk and opportunity management processes
The processes of risk management and opportunity management - which, as described above, are quite different from each other - can initially be designed separately. This includes a proper methodology for risk analysis as well as a large toolbox of creativity techniques. In both cases, dealing with the VUCA world means not

to be excessive in standardizing the approaches. A willingness to experiment and to engage in "soft", variable planning as well as consistently thinking in different options are essential prerequisites. There is a danger of over-analysis, especially in the area of risk. The use of complex mathematical methods in risk management can easily lead people to believe that the results are more reliable than they actually are – especially in the VUCA world. In case of doubt, it is more important to derive measures and implement them immediately than to perfect the analysis (further).

C4. Connect the processes to an IROM

As shown in Illustration 5, it is important to integrate risk and opportunity management processes so that the measures ultimately presented to top management have already been screened for their opportunity and risk potential. Accordingly, it is important to establish firm links and interfaces in the processes. This should be done at least as part of the derivation of measures: No risk management actions should be submitted for approval without an analysis of complementary opportunities related to all acceptable treatment options Similarly, no action to take advantage of opportunities should be presented without identification, analysis and – if necessary – mitigation of the associated risks.

C5. Cooperate

In addition to combining processes, as discussed above, it is also necessary to use multi-perspective teams when assessing change in the VUCA world. Such teams are essential for the identification of the resulting risks and opportunities, respectively, and for the subsequent analysis. The use of appropriately combined teams can accelerate the processes, as they might even replace the interfaces that would otherwise have to be established (see C4). Whether this works or not depends largely on the people involved, especially their ability and willingness to work together. A certain organizational culture, which constitutes the framework factor C7, also contributes to this.

C6. Control continuously

No management approach can be successful unless it is continually improved and adapted to changing conditions. This also applies to an IROM. If the underlying management system is already certified based on an ISO management standard, it goes without saying that the IROM should be integrated into the organization's regular continuous improvement process.

C7. Cultivate

The effectiveness of the IROM has to be cultivated and thus supported by an appropriate organizational culture. This includes aspects such as readiness to change, open error culture, willingness to communicate across departmental boundaries, and a high level of personal responsibility.

C8. Configure

A successful management approach in the VUCA world requires besides the usual prerequisites (a clear purpose with strategy and objectives, clear responsibilities and transparent structures) a few special features in the setup. These include, among others, a modular composition, the use of redundant structures to hedge particularly relevant risks, the targeted incorporation of optionality, and the reduction of critical dependencies. These necessary arrangements represent a clear counter-design to a "lean organization" and the postulate of cost reduction.

A management approach in 3D facilitates integration

In the interviews conducted it became clear that many interviewees found it difficult to establish the process-related success factors mentioned above. One of the main reasons being, that ad hoc multi-perspective teams were perceived as a provisional solution that was particularly difficult to explain to auditors and regulators. This view is problematic. It is to be expected that the pace of change will continue to increase. As a result, reality will continue to move further away from the ideal of "controlled conditions". An IROM with interconnected processes and multi-perspective teams formed for specific topics is not just a provisional solution, but instead the most sensible remedy for dealing with the VUCA world. The reason for the difficulty in accepting this type of organizational design may also lie in the fact that processes and management systems are usually modelled only in two-dimensional space. Connections that go beyond easily depicted sequences, for example necessary parallel communication processes, are added as notes or placeholders, but are not otherwise included in the illustrations. As a result, Illustration 5 already appears confusing. The real organizational design takes place in three-dimensional space. Communication and information networks, project groups, and informal exchange formats are organized around the processes described. However, there is a corresponding high risk that these undescribed aspects will grow organically rather than being controlled in a purposeful manner. The more complex the environmental and organizational conditions become, the less appropriate this type of organizational design will be.

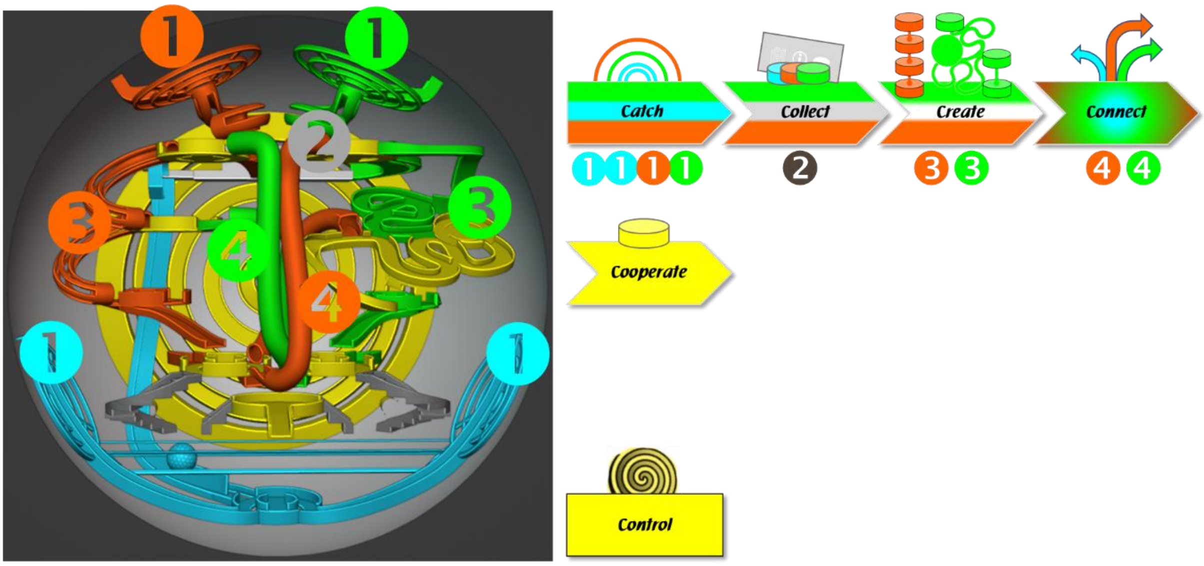

Illustration 8: IROM Connectus

Therefore, as part of the research project a 3D management model for an IROM was developed, the so-called IROM Connectus (Illustration 8). For the first time, it allows a holistic, comprehensible and coherent representation of an IROM based on the process-related success factors mentioned above. The Connectus is intended not only to provide a holistic view of the IROM, but also to facilitate discussions with auditors and regulators.

Conclusion

An organization that seriously wants to achieve antifragility and benefit from the conditions of the VUCA world cannot avoid the targeted definition, control and integration of its risk management and opportunity management processes. The first step is to acknowledge the fundamental differences between the two management approaches. Where procedural-analytical methods meet iterative-creative techniques, procedures, people and mindsets differ. Successful integration requires investment in the design of processes, the empowerment of relevant experts to work in multi-perspective teams, and an integrative, open communication culture. In return, it leads to the development of promising, company-specific actions and better decisions.

TIP

The risk-based approach is a recurring theme in the internationally recognized DIN EN ISO 9001 standard, as preventive action is a core task of a quality management system. In addition to focusing on risk, the treatment of opportunities must not be neglected either. According to this standard, opportunities can arise as a result of a situation that has a favourable effect on the achievement of an intended result. Clause 0.3.3 of ISO 9001 provides good advice on this and lists some examples of opportunities. Additional information on what is meant by opportunities can also be found in note 2 to clause 6.1.2.

About the author

Prof. Dr. Patricia Adam is DQS auditor and, after holding various positions with a major financial services provider, since 2004 Professor of International Management at the University of Applied Sciences and Arts Hanover. As expert in organizational development and EFQM assessor with international assignments, she contributes her expertise at DIN and ISO, as author and as keynote speaker at numerous professional events. Her Springer publication "Agile in ISO 9001 - How to Integrate Agile Processes into Your Quality Management System" (2023) is the enhanced edition of her original Gabler essential (2020) that has become the standard reference book in Germany.