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## Intervention-Based Case Study of ISO 56001-Aligned IMS Implementation

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**Abstract:** This paper tackles the practical challenge of implementing a standardized Innovation Management System (SIMS) based on ISO 56001 in established organizations. Despite the fact that ISO 56000 series offer a common framework for managing innovation, organizations persistently falter to translate its requirements into a framework that can be implemented. Following an exploratory qualitative and intervention-based case study approach, this research advances and applies a stepwise implementation methodology within a real organizational setting. This research contributes to innovation management literature by providing an applicable guideline for ISO 56001 based-IMS implementation, offering valuable understanding for managers, practitioners, and researchers seeking to systematically manage innovation.

**Keywords:** Innovation; Innovation management system (IMS); standardized innovation management system (SIMS); ISO 56001

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### 1. Introduction

Although innovation seems to be the rescue boat toward the shore of prosperity and economic growth (Schumpeter 1934) and for organizations withstanding a high pressure from ruthless and competitive environments (Roberts 1998; Porter 1980). Hyland and Karlsson (2021) highlighted that research consistently shows that established organizations face unique challenges in managing innovation.

To meet this need, a Standardized Innovation Management System (SIMS) has emerged, over the past few decades, producing a framework for systematically managing innovation within organizations (Mir et al. 2016). The introduction of the ISO 56000 family of standards enhanced this evolution toward standardization.

Despite the rising acknowledgment of the relevance of integrating systematic innovation management within organizations, they still struggle in the implementation of SIMS. Specifically, ISO56001, which outlines requirements for an Innovation Management System (IMS), and represents a significant advancement in the formalization of innovation management practices.

Nevertheless, converting these requirements into concrete organizational practices remains a complex and demanding challenge. Many organizations face difficulties upgrading from informal, ad hoc innovation initiatives to a structured and standardized system. Obstacles encompass mainly the lack of leadership support, clear governance structures, innovation processes, strategy, objectives, absence of performance measurement systems, and limited organizational capabilities and resources to support systematic innovation processes. Therefore, the implementation of an ISO 56001-based IMS is often perceived as ambiguous, resource-intensive, and difficult to operationalize.

In recent years, research on IMS and the ISO 56000 series has expanded considerably. However, important gaps persist. A large share of the existing literature revolves around conceptual models, the benefits of standardizing innovation practices, or a few isolated implementation cases. In practice, there is still a lack of clear, structured, and replicable methodologies that can guide organizations through the implementation of IMS. This gap is particularly evident within the ISO 56001 framework, as a relatively new standard, it is not yet supported by sufficient empirical research or practical implementation guidance. Hence, organizations and innovation practitioners are deprived of effective instruments to translate the standard's requirements.

To address these hurdles, the primary objective of this research is to bridge the gap between ISO 56001 and organizational practice. By developing a structured implementation framework, this study offers a clear, practical methodology designed for organizations that are seeking to integrate SIMS.

Therefore, this study is guided by the following central research question: What framework can effectively guide the implementation of an ISO 56001-based IMS, and what insights emerge from its application in practice?

This main question is supported by the three following sub-questions:

- What are the key steps required to implement a SIMS within an organization?
- What gaps exist between an organization's current innovation practices and the formal requirements of ISO 56001?
- How to effectively design and implement ISO 56001-aligned IMS?

The theoretical and practical implications of this study reside in its ability to join conceptual research and organizational practice. The proposed implementation framework translates ISO 56001 requirements into a clear and practical approach. Hence, the research extends existing literature beyond description into actionable application.

This framework provides managers with guidance on creating their IMS and helps innovation's practitioners align organization's IMS with international standards.

## **2.Literature Review**

### *2.1. Innovation Management Systems (IMS):*

An Innovation Management System (IMS) is widely regarded as organized, systematic and comprehensive approach that enables organizations to manage innovation initiatives and workflow and turn ideas into value. Based on ISO 56001, an IMS consists of both interrelated and interacting components intended to perceive both financial and non-financial value through cyclical processes that enable opportunity identification, concept development, and solution deployment. Lerche and Magnusson (2025) strengthened this systemic view and highlighted the involvement of organizational components including leadership, resource allocation and planning to foster the development of innovation capabilities and realizing desired objectives. Likewise, Karstegl et al. (2025) emphasize that an IMS allow continuous evaluation and improvement while it supports structured and sustainable innovation.

Together, these views indicate that an Innovation Management Systems (IMS) is an integrated and dynamic system that aligns organizational elements, processes, and governance mechanisms so that they can work together to create value and increase innovation performance. ISO 56000 series provide organization with a formalized, systematic and standardized framework for managing innovation.

By using an IMS, organizations can transition from informal and disjointed to a more formalized, cohesive and strategic way of carrying out innovation-related activities. Existing research has shown that adopting an IMS leads to an increase in innovation capability, greater collaboration across departments, and the alignment of innovation initiatives with organizational strategy. IMS also support improved decision making in times of uncertainty; provide a means by which organizations can capture, store and disseminate knowledge; and foster a culture of continual improvement. Idris and Durmusoglu (2021) highlighted that an IMS can strengthen innovation capabilities, encourage value creation, improve processes, and stimulate different kinds of innovation and outcomes.

The deployment of an IMS enables organizations to shift their innovation initiatives from informal and fragmented way toward more systematic approach. Existing research has shown that it enhances innovation capabilities, cross-functional collaboration improvement, and aligns innovative initiatives with organizational objectives. It is also argued that IMS support more informed decision-making under uncertainty, provide a means by which organizations can capture, store and disseminate knowledge, and foster a culture of continuous improvement.

However, while these contributions offer valuable insights, they must be viewed within the context of several inherent limitations.

Current research remains heavily focused on a normative viewpoint. It often highlights the benefits of IMS while neglecting challenges and obstacles related to the implementation of such management system. Yet, the difficulties involved in integrating IMS into existing frameworks and potential implementing challenges, such as internal resistance, resources constraints are less explored. Consequently, even that IMS enhances innovation performance, further research is necessary to clarify the conditions that are necessary for successful and efficient implementation.

## *2.2. Standardized innovation management systems (SIMS)*

Standardized innovation management systems (SIMS) are normative management systems that help organizations manage their innovation activities. Therefore, they enable the implementation of their innovation strategy. Hence, SIMSs establish the organization's capacity to identify and explore new opportunities while adapting to changing environmental conditions. Guarantying that innovation is not limited to merely attractive new inventions (Idris and Durmuşoğlu, 2021).

Organizations must effectively manage their innovation efforts to achieve sustainable success, which have been qualified from a systems perspective (Magnus & Mats 2019). Standardization of these systems optimize their dynamic, and therefore the adoption of standardized innovation management systems (SIMS) provides more control and facilitates continued improvements throughout time (Idris & Durmuşoğlu 2021). In addition; by supporting various types of innovations; aligning with International Standardisation Organization (ISO) SIMS will improve organizational capabilities with respect to creating value from its innovations (Indris & Durmuşoğlu, 2021).

The operational benefits of SIMSs is tackled in recent research. As they revealed, the implementation of SIMSs is an effective approach for managing, evaluating, and continuously improving innovation initiatives (Arslan et al., 2025). Additionally, the use of SIMSs has been associated with the development of ambidextrous capabilities that allow organizations to explore new opportunities and exploit existing competencies at the same time; thus, improving organization's performance (Arslan et al., 2025).

Since 2013, the ISO 56000 series has been introduced by the International Organization for Standardization (ISO) as a set of standards dedicated to innovation management. Particularly ISO 56001 is significant as it specifies certifiable requirements. Despite this progress, empirical research on the practical implementation of these standards remains limited. Existing studies have mainly focused on isolated cases, such Gueorguiev (2023) sharing insights and expertise from implementing an IMS based on ISO 56000 principle, the study does not provide a standardized or replicable framework that can be applied across different organizational settings. Also, Agresta (2024) with his research proposed a hands-on view of how to make this transition happen. He shares what he learned from designing and implementing IMS in a public institution. However there remains a significant disinclination to adopt a SIMS like ISO 56001. By opting for simplified reference models to avoid perceived complexity, current research leaves a critical gap: we lack a transferable, empirical framework for organizations seeking to move beyond 'simple prototypes' toward a fully institutionalized and certifiable IMS.

Overall prior research has extensively explored IMS and their corresponding standards, with several studies underscoring the strategic benefits of SIMSs. However, comparatively minor attention has been devoted to the actual mechanics of their implementation. This constraint is especially obvious in the context of ISO 56001, where the translation of the standard requirements through structured, replicable, implementation frameworks remain insufficiently explored as it was introduced recently in 2024. Consequently, organizations face difficulties in effectively deploying, evaluating, and continuously improving their innovation management practices in a structured and comparable manner. Therefore, this study aims to address this gap by developing and deploying an ISO 56001-based IMS implementation framework.

### **3. Research Methodology**

#### *3.1 Research Design*

This study adopts an exploratory qualitative research design combined with an intervention-based approach grounded in a case study methodology to develop an in-depth understanding of the design and implementation of an IMS aligned with ISO 56001. The choice of exploratory qualitative research is deemed appropriate for capturing contextual, behavioral, and governance-related dimensions of IMS implementation. The intervention-based dimension positions the researcher as an active participant within the organizational setting, highly involved in the problem-solving process rather than engaged in discreet observation without interference (Chandrasekaran et al. 2023). Therefore, he contributed to the design and deployment of the IMS. The study integrates planned interventions, including an initial gap analysis against ISO 56001 requirements, the development and validation of IMS documentation, the facilitation of training and awareness activities, and support for governance and process formalization. The researcher active engagement enabled the generation of both practical outcomes for the organization and rich empirical insights for academic analysis.

#### *3.2. Case Study Context*

The case study company is one of the leading consulting firms specializing in project management and entrepreneurship development in Tunisia and Africa. It offers a comprehensive service to assist governments, community, startups, businesses, NGOs and donors successfully carrying out their projects. The company identified the opportunity to be the pioneer consulting firm certified in ISO56001. To reach this goal it needs to successfully establish an IMS aligned with the related standard as a first step toward achieving the certification. This work requires deep expertise in both innovation's best practices and the standard's rigorous requirements. The organization lacks internal knowledge, structured methodologies, or resources to navigate this complex process alone. This research brings critical value by providing an objective assessment of existing innovation practices, identifying gaps against ISO 56001, also, designing and deploying a tailored IMS.

#### *3.3. Data Collection Techniques*

Data were collected between February and April 2025. It relied on both primary and secondary data as follows:

### 3.3.1. Secondary data:

Secondary data were first used to establish a theoretical foundation, identify research gaps, and refine the research questions. These sources included the ISO 56000 series, certification body reports, and internal organizational documents. To prepare for tailored implementation, a comprehensive clause-by-clause review of ISO 56001 was conducted. Each requirement was analyzed and interpreted into practical documents and tools, such as innovation policy, innovation strategy and objectives, the context of the organization, the interested party needs and expectations etc. This method ensured direct alignment with the standard's expectations. This process required significant time and effort, resulting in elaborating a comprehensive Requirements and Evidence Document (see Appendix 2).

### 3.3.2. Primary data:

Primary data collection was mainly based on methodological triangulation, combining, semi-structured and informal interviews, direct observation and using a developed checklist.

More specifically, 18 interviews were conducted. Five interviews with experts in March 2024, providing implementation insights beyond those available in the literature. In April 2024, additional interviews were conducted with ten consultants from the case-study organization to assess the organizational context, stakeholder expectations, and innovation maturity. Data collection was further enriched through three interviews completed with a dedicated ISO 56001 checklist (see Appendix 4), participation in specialized webinars, and direct observation. Further details are provided below as follows:

#### 3.3.2.1. Webinars:

To begin, the researcher interactively participated in three webinars hosted by a leading global certification firm. Unlike passive observation, this approach embraces a real-time engagement with experts through direct Q&A. It answers questions regarding ISO 56001 requirements and certifications; how ISO 56001 integrates with and supports other standards such as ISO 9001 and ISO 14001; and whether the proposed implementation phases were appropriate. Webinar details are in Table 1.

**Table 1:** Webinars

<i>Webinar</i>	<i>Body</i>	<i>Expert</i>	<i>Duration</i>
Innovation management systems based on ISO 56001	Firm A	Certification Expert	60mn
How to Integrate ISO 9001:2015 and ISO14001:2015	Firm B	Certification Specialist	60mn
GIMI's Chief Certified Innovation Officer (CCIO)	Firm C	Certification Specialist	60mn

**Note:** \* To ensure confidentiality and protect sensitive information, the names of the firms involved in this study have been anonymized and replaced with identifiers (Firm A, B, C, and D).

### 3.3.2.2. Direct observation:

During the weekly meetings, it was observed that progression of the innovation projects was discussed within all teams and difficulties were reported, but most of the time was sidelined by 'urgent' operational issues. As example, on three separate meeting, the innovation agenda initiatives were postponed due to other project deadlines. This observation provides empirical evidence of the 'Resource Allocation' gap, where staff time is theoretically assigned to innovation 's initiatives but practically unavailable.

### 3.3.2.3. Semi-structured interviews with experts (externe):

Interviews with different experts provided nuanced perspectives that secondary data couldn't capture. Their input helped confirm our assumptions drawn from literature, grounding theories in real-world experience. They filled critical gaps with firsthand, up-to-date knowledge covering the practical implementation of IMS not yet documented in published sources. Experts shared actionable advice about what works (or fails) in practice to ensure our project is feasible. We developed and used the Interview Guide to conduct those interviews. (see Appendix 1). The semi-structured interviews with 5 expert, are summarized in Table 2.

**Table 2:** Interviews with experts

<i>Interviewees</i> <i>'Job description</i>	<i>Expertise</i>	<i>Body</i>	<i>Localization</i>	<i>Modality</i>	<i>Duration</i>
Consultant	Certification Specialist	Firm A	USA	Online meeting	40mn
Consultant	Certification Specialist	Firm B	UK	Online meeting	40mn
Managing Director	Certification Specialist	Firm C	UK	Online meeting	40mn
Sales Manager Africa Business Assurance	Certification Specialist	Firm D	South Africa	Online meeting	40mn
Consultant	Certification Specialist	Firm E	UK	Online meeting	40mn

**Note:** Refer to the explanatory notes following Table 1.

### 3.3.2.4. Informal interviews:

To gather a deep perception of the case study organization and their context, understanding the needs and expectations of their interested parties, and assessing their current innovation practices, informal interviews were conducted. The main points discussed were about their understanding of innovation and the need for it, their leadership commitment to innovation, how they manage innovation activities, their

innovations cultures, vision, strategy, objectives, resources allocated for innovation. The unstructured interviews with 10 key stakeholders, are summarized in Table 3.

**Table 3:** Informal interviews

<i>Interviewees 'Job description</i>	<i>Modality</i>	<i>Duration</i>	<i>Key Verbatim Evidence</i>	<i>The Main insights</i>
Chief Executive Officer	On site	60mn	"We aim to be pioneer by aligning our innovation practices with international standards such as ISO 56001 to enhance our innovation capability."	High level involvement and commitment of the top management to implement ISO 56601-based IMS provides a solid foundation for change.
Senior Manager	On site	40mn	"As we work closely with innovation, we don't handle it as a system"	
Senior Manager	Online meeting	40mn	"We are never short on ideas; we have many innovation initiatives popping up. The problem is that they are like islands. There is no common language or central strategy connecting them"	Innovation was present across deferent initiatives but were still managed in informal way.
Consultants (07)	On site	30mn (For each one)	" There is no systematic documentation for evaluation or improvement. If a project fails, the lessons are lost." "There is no formal strategy that dictates where the R&D budget goes or why" "We need safe environment for experimentation to develop our idea."	The absence of a formal innovation policy, strategy, Lack of fostering innovation culture, undefined innovation objectives, and missing documentation for performance evaluation and improvement like internal audit practices.

### 3.3.2.5. Assessment checklist:

Due to the absence of existing assessment tools for the newly published ISO 56001, a tailored gap analysis checklist was developed. This process involved a rigorous interpretation of the standard's clauses into measurable assessment criteria. Although being resource-intensive, the resulting tool provides a comprehensive foundation for evaluating organizational alignment and guiding the subsequent implementation phases. To evaluate current innovation practices, structured interviews were conducted with a purposive sample of three key stakeholders. Detailed specifications are documented in Table 4.

**Table 4:** Interviews with Gap Analysis checklist

<i>Interviewees 'Job description</i>	<i>Modality</i>	<i>Duration</i>	<i>The Main insights</i>
Chief Executive Officer	On site	40mn	The main fundings are identified and presented in the Gap Analysis Report. (See Appendix 5: Gap Analysis Report)
Senior Manager	On site	40mn	
Senior Manager	Online meeting	40mn	

### 3.4. Data Analysis

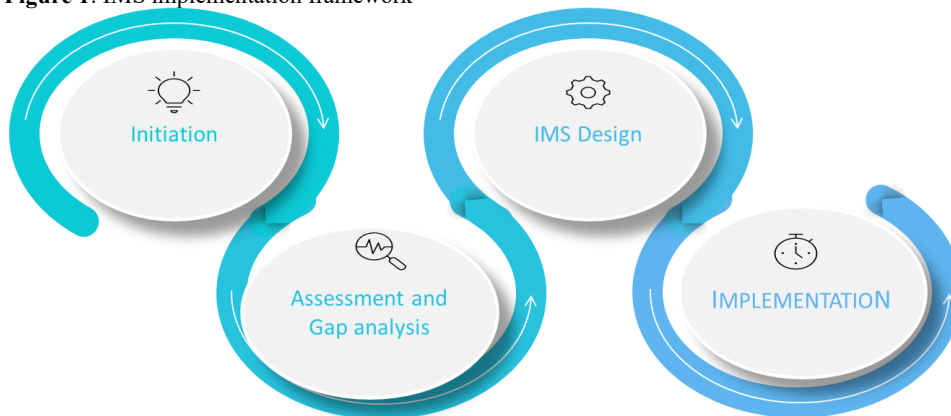
The collected data were analyzed through a detailed clause-by-clause examination of ISO 56001 to support a tailored and fully aligned implementation approach. Information gathered from interviews, direct observation, webinars, organizational documents, and the ISO 56001 checklist was compared and interpreted to identify implementation needs, stakeholder expectations, and gaps in innovation maturity. The analysis also relied on the structured implementation of the standard using an established Project Management Plan (PMP), allowing the integration of findings into a coherent implementation framework.

## 4. Findings:

Our findings suggest that the successful implementation of a standardized innovation management system (SIMS) based within any organization requires a phased approach. For deploying IMS based on ISO 56001 within the case study organization, we developed a practical and replicable implementation framework inspired by ISO standard implementation approaches specially ISO 9001, ISO 14001 and project management methodology (PMP).

We propose a four-phase approach, as shown in Figure 1, aligned with project management principles. It starts by anchoring the project and defines its scope through Initiation, followed by diagnosing organizational innovation maturity via Assessment and Gap analysis. Once the disparity is well recognized, the IMS Design phase builds the necessary IMS architecture, leading finally to full Implementation where the system becomes a functional reality. (See Table 4)

**Figure 1:** IMS implementation framework



### 4.1. IMS implementation framework

The proposed framework is summarized in Table 4 and further detailed as follows:

**Table 4:** IMS implementation approach

<i>PHASE</i>	<i>MAIN TASK</i>
Initiation	Kick off meeting: Signature of framework and official launch of the project Designing the team / Innovation Steering Committee (ISC) Purchase materials ISO 56001 Prepare the organization Understand the organization and its context Understand the needs and expectations of interested parties Achieving management commitment and leadership
Assessment and Gap analysis	Perform an assessment using Gap Analysis Checklist Review gap report and take decision to close gap: Road map Change management
IMS Design	Planning the change Creating a project plan: Implementing IMS according to ISO 56001 Initiation: Define charter, stakeholders Planning: Gap analysis review, design IMS framework
Implementation	Execution: Implement the IMS across the organization. Closure: Finalize implementation, review outcomes, and transition to continuous improvement.

#### *4.1.1. Phase 1: Initiation (The commitment phase)*

Implementation of this phase occurs through firm commitment of top management, including officially approving and launching an IMS project at a kick-off meeting. A project team is then formed and mobilized to manage the project, and an Innovation Steering Committee (ISC) is also formed with appropriate roles and duties allocated to its members. Concurrently, several preparatory activities for the project will be undertaken, including obtaining ISO 56001 documentation, raising organizational awareness and conducting an initial stakeholder analysis to ensure that the project's strategic objectives are aligned with innovation needs.

#### *4.1.2. Phase 2: Assessment and Gap Analysis (The reality check)*

Before designing the IMS, it is essential to measure the distance between current innovation practices and the ISO 56001 requirements. This is achieved through a Gap Analysis, a primary activity that provides empirical evidence regarding the disparity between the organization's current innovation practices and the standard requirements, highlighting the most critical areas for immediate intervention.

The Gap Analysis is conducted by using a developed ISO 56001 Checklist (See Appendix 4) then synthesized into a detailed Gap Analysis Report (see Appendix 5) to help the organization understand its readiness level for ISO 56001 and to prioritize actions for improvement and to design an action plan for implementing a tailored IMS. With the plan in place, the focus shifts to change management. Articulating the "why" behind the IMS implementation to all stakeholders is essential, as it builds buy-in and reduces resistance.

#### *4.1.3. Phase 3: IMS Design (The architecture phase)*

This phase begins by planning the change as a key step toward the transition to an ISO 56001 based IMS, followed by the design of the IMS which involves structured activities to ensure full alignment and foster a culture of innovation. Key activities include:

##### *4.1.3.1. Workshops and Interviews*

To design a tailored IMS, we engaged stakeholders at every level including top management, senior consultants, and employees, through a series of leadership interviews and collaborative workshops. These sessions were designed to define the core pillars of our IMS framework, specifically:

###### *4.1.3.1.1. Strategic foundation (context and leadership)*

We engaged leadership to define the organization's high-level direction, resulting in:

- Organizational context and stakeholders: formal procedures for determining the context of the organization (4.1) and the needs and expectations of interested parties (4.2).
- Strategic intent: clearly defined innovation intent (4.3.1) and the overall scope of the IMS (4.3.2).
- Governance: the establishment of the innovation policy (5.2), innovation strategy (5.3), and an innovation organization chart (5.5) to clarify roles.
- Culture: a comprehensive innovation culture report (5.4) to benchmark our starting point.

###### *4.1.3.1.2. Tactical planning and risk management*

Through team workshops, we moved from vision to action by developing:

- Risk & opportunity: a formal procedure for addressing risks and opportunities (6.1).
- Goals: clear innovation objectives (6.2) and a change management plan (6.3) to guide the transition.

###### *4.1.3.1.3. Support systems and operational flow*

To ensure the IMS has the "engine" to run, we collaborated on:

- Resource management: creating a resource plan (7.1), competence procedure (7.2), and an awareness and communication plan (7.3 & 7.4).

- Specialized assets: developing procedures for intellectual property (7.1.7) and identifying relevant innovation tools and methods (7.1.8).
- Core operations: developing the innovation processes (8.3) that will drive new ideas to market. For the case study organization, we established a structured stage-gate innovation process as shown in Figure 2.

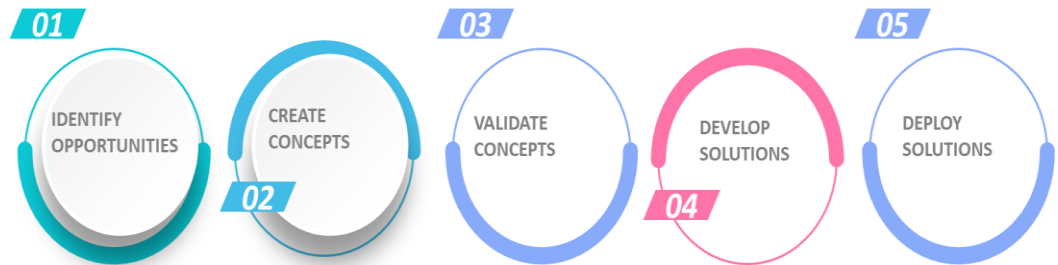
#### 4.1.3.1.4. Evaluation & continuous improvement

Finally, we established the mechanisms for long-term success:

- Performance tracking: procedures for internal audits (9.2) and management reviews (9.3).
- Refinement: a framework for handling nonconformity and corrective actions (10.2).

**Note:** To ensure full alignment with ISO 56001, we have mapped our documentation directly to the standards structure. By adopting the same numbering for all Clauses (4–10) and Sub-clauses.

**Figure 2:** Innovation Process



#### 4.1.3.2. Elaborating IMS Documentations and Communication

The design of IMS is then formalized through the elaboration of all needed IMS documents, paired with a robust communication strategy. Formal documents serve as the organization’s “single source of truth”. To remain effective, they must be clear and accessible to all employees while remaining adaptable to accommodate future improvements. These suite of documents include formal innovation process, policy, strategy, intent, objectives and all other essential records (See Appendix 3).

However, for these documents to be more than just files on a server, they must be supported by a strategic communication plan. This ensures that every team member understands not just what the new processes are, but why they are being implemented, effectively turning potential resistance into active participation. To ensure transparent communication, all those documents were shared with all employees through direct controlled access with common drive, internal emails and weekly meetings.

#### 4.1.3.3. Awareness and Training Program Development

This includes launching an internal awareness campaign on the importance of innovation, innovation management and the implementation of IMS in accordance with ISO 56001. Also, elaborating tailored training programs (See Appendix 6) enables effective implementation of the IMS.

#### *4.1.4. Phase 4: IMS Implementation (The Institutionalization Phase)*

The final phase focuses on practical use of the IMS, turning new ideas or opportunities that are aligned with innovation strategy and objectives to a new innovation project that will be managed through in the IMS or applying the IMS to ongoing project. Once the rolling step of IMS is reached, the implementation phase is finally finalized, and a review of the outcomes should be conducted. Subsequently a smooth transition to continuous improvement should be initiated. Simultaneously continuous training and incentive programs should be conducted to foster the innovation culture. Later on, an internal audit should be conducted to ensure compliance with ISO 56001.

## **5. Discussion**

Through a structured and stepwise approach as the findings bring to light, a successful ISO 56001-based IMS implementation is reached. The proposed four-phase framework demonstrates how organizations can progressively adopt SIMS, moving from strategic intent to full operational deployment. This finding aligns with prior research emphasizing a systemic approach for innovation management (Karlsson & Magnusson,2019).

The framework emphasizes the importance of leadership engagement. The active engagement of executive management was critical to obtaining and using resources effectively for IMS implementation. This result supports other studies that point out leadership as a key driver for organizational performance and innovation (Nani et al. 2015).

Furthermore, performing an Assessment and Gap Analysis phase enables us to pinpoint exactly where current innovation practices failed to meet ISO 56001 requirement. This step provides direct insights that actively shape the IMS architecture, reducing uncertainty of implementation. Numerous studies support these findings, indicating that the gap analysis is a critical first step for aligning an organization's practices with standard requirements (Tarigan and Rajagukguk ,2023).

The IMS design phase was instrumental as it structured innovation practices in case study organization. The development and formalization of core components of the system improved coordination and transparency. Also, it enabled accountability and clarified responsibilities. The antecedent research on the practical design of IMS report similar findings (Kihlander et al., 2024).

The implementation phase showed that through active engagement, communication, and a willingness to adapt, the translating into operation is done. This reflects a greater understanding that implementing a management system is an iterative process; it is not a static linear process (ISO 56001).

This research contributes to both theory and practice. The proposed implementation framework expands current understanding. It translates ISO 56001 standard's

requirements into applicable steps. The study links the conceptual model with practical application. The framework also serves as a guideline for managers to establish their IMS and assist practitioners in achieving alignment with internationally recognized standards.

Limitations are present in this study. They arise from utilizing one case study organization only. This hinders our ability to generalize our findings. The intervention-based methods may also impact the results since these methods may have limited ability to be generalized and transferred to other organizations. Potential research could serve to validate and/or verify the proposed framework across various industries and organizations.

This paper shows that implementing an ISO 56001 based IMS can be done more successfully by following an organized, phased-in, and intervention-based approach. The framework developed through this research not only helps to meet the requirements of the standard but also improves the overall ability to integrate the means of innovating into organizational functions and therefore improve innovation performance.

## **Conclusion**

This study explored the effective implementation of a standardized innovation management system (SIMS) based on ISO 56001 within organizations. Drawing on an exploratory case study combined with an intervention-based approach, the research advances a practicable and replicable implementation approach. Demonstrating that successful implementation is best approached as a phased and structured process.

A key contribution of this research was to create a simple and easy-to-follow plan for putting SIMS into action. This plan was inspired by the implementation of well-known standards like ISO 9001 and ISO 14001 as well as project management methodologies (PMP). The study provides organizations with a clear path to follow. By using these four-phase implementation approach they make sure they meet the requirements of ISO 56001. This framework translates abstract standard guidelines into actionable steps, thereby reducing ambiguity and facilitating implementation.

From a point of view the study showed that taking it one step at a time helps organizations build their IMS, reduce resistance to change and make sure their innovation work aligns with their overall goals. This stepwise approach supports learning adapting and getting better over time. All of which are important for keeping innovation going. From a theoretical point of view the research added to what we know about making innovation management more standardized. It filled a gap between what the ISO 56000 series says organizations should do and what works in life. By basing the plan on both standardization and project management the study gave a complete picture of how to put innovation systems into action.

However, the study did have some restrictions. The limitations of just having one case study means that the researcher cannot generalize it. The size, industry and maturity of the organization may also impact on how effective the proposed framework is, and future research could build on this study by testing the proposed approach across multiple settings, or by comparing it against other methods. In the end this research showed that

putting in place an IMS is not just about following the rules. It needs a structured and stepwise approach.

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## **Appendix 1: Expert Interview Guide**

**Objective:** To explore the practical challenges, best practices, and critical success factors in adopting ISO 56001 for innovation management.

### **1. Introduction (5 mins)**

**Purpose:** Explain the project of ISO 56001 implementation.

**Icebreaker:** Explain how the case study organization first became interested in ISO 56001.

### **2. Core Questions**

#### **A. Understanding ISO 56001**

\*“How would you explain the core purpose and value of ISO 56001?”

“Which clauses or requirements of the standard do organizations most often misunderstand?”

#### **B. Certification Process & Steps**

3. “Can you walk us through the typical certification journey, from decision to audit?”

Probe: “What’s the most common stumbling block in this process?”

“How long does certification usually take, and what factors influence the timeline?”

#### **C. Implementation Process & Phases**

5. “What are the key phases of implementing ISO 56001? Where do organizations tend to rush or lag?”

6. \*“How do you align ISO 56001 with existing innovation frameworks?”

#### **D. Resources Needed**

7. “What internal/external resources are critical for success?”

#### **E. Assessment & Gap Analysis**

8. “What’s your approach to conducting a gap analysis against ISO 56001?”

Probe: “How do you prioritize which gaps to address first?”

“What tools or templates do you recommend for self-assessment?”

#### **F. Accreditation & Audits**

10. “How should organizations select an accreditation body? What red flags should they watch for?”

11. “What surprises organizations most during the audit process?”

#### **G. Pricing**

12. “What are the typical cost drivers for certification?”

### **3. Closing**

Reflection: “If you could give one piece of advice to an organization starting this journey, what would it be?”

Follow-up: Ask if they’re open to reviewing findings or recommending other experts.

## Appendix 2: Requirements Needed document and Evidence (Sample)

Monitoring, measurement, analysis & evaluation	<b>Analysis and evaluation</b>	<ol style="list-style-type: none"> <li>Documentation of performance analyses and identified gaps.</li> <li>Evidence of adjustments and corrective actions implemented.</li> <li>Records of periodic reviews and decisions taken for continuous improvement.</li> </ol>
	<b>Internal audit</b>	<ol style="list-style-type: none"> <li>Internal audit program with schedule.</li> <li>Audit checklists in accordance with ISO 56001 requirements and internal processes.</li> <li>Audit reports documenting the conformity and effectiveness of the innovation management system.</li> <li>Evidence of implementation of corrective actions following audit results.</li> </ol>
	<b>Internal audit programme</b>	<ol style="list-style-type: none"> <li>Internal audit program with schedule and priority setting.</li> <li>Audit checklists with objectives, criteria and scope of audits.</li> <li>Documentation on auditor selection and audit results.</li> <li>Audit results reports and evidence of corrective or preventive actions.</li> </ol>
	<b>Management review</b>	<ol style="list-style-type: none"> <li>Schedule of planned management reviews.</li> <li>Management review reports including the assessment of the relevance and effectiveness of the system.</li> <li>Evidence of decisions taken during reviews (corrective actions, readjustments).</li> <li>Documentation on the monitoring results and the implementation of the actions decided.</li> </ol>
	<b>Management review inputs</b>	<ol style="list-style-type: none"> <li>Reports on the progress of actions from previous reviews.</li> <li>Analysis of external and internal trends influencing the innovation management system.</li> <li>Documentation of performance results, achievement of objectives, and lessons learned.</li> <li>Internal audit, monitoring and analysis reports of innovation indicators.</li> <li>Documentation of continuous improvement initiatives implemented.</li> </ol>
	<b>Management review results</b>	<ol style="list-style-type: none"> <li>Management review reports with decisions taken on continuous improvement initiatives.</li> <li>Documentation on changes made to the innovation management system.</li> <li>Action plans for the initiatives and evidence of their implementation.</li> <li>Follow-up records and verification of actions resulting from the review.</li> </ol>
Improvement	<b>Continual improvement</b>	<ol style="list-style-type: none"> <li>Internal audit and performance review reports.</li> <li>Action plans for continuous improvement initiatives.</li> <li>Documentation of decisions to prioritize improvement actions.</li> <li>Monitoring and evidence of implementation of corrective and preventive actions.</li> </ol>
	<b>Nonconformity and corrective action</b>	<ol style="list-style-type: none"> <li>Non-conformity reports, documenting the nature of the incident and the actions taken.</li> <li>Root cause analyses of non-conformities.</li> <li>Corrective action and follow-up plans.</li> <li>Corrective action evaluation reports, including their effectiveness.</li> <li>Evidence of changes made to the system following non-conformities (revised procedures, training).</li> </ol>

### Appendix 3: IMS Documents.

ISO Clause	ISO Ref	IMS Documents
4. Context of the organization	4.1.	Determining Context of the Organization
	4.2.	Determining Interested Parties needs and expectations Procedure
	4.3.1.	Innovation Intent
	4.3.2.	Scope of the innovation management system
5. Leadership	5.2.	Innovation Policy
	5.3.	Innovation Strategy
	5.4.	Innovation Culture Report (IMS)
	5.5.	Innovation Organization Chart
6. Planning	6.1.	Addressing risks and opportunities Procedure
	6.2.	Innovation Objectives
	6.3.	Change Management Plan
7. Support	7.1.	Resource Plan
	7.1.7.	Intellectual Property Procedure
	7.1.8.	Innovation Tools and Methods
	7.2.	Competence Procedure
	7.3.	Awareness Plan
	7.4.	Communication Plan
	7.5.	Procedure for Control Documented Information
8. Operation	8.3.	Innovation Processes
9. Performance evaluation	9.2.	Internal audit Procedure
	9.3.	Procedure for Management review
10. Improvement	10..2.	Nonconformity and corrective action

### Appendix 4: Gap Analysis checklist (Sample)

iso reference	Gap Analysis Question	GAP FUNDING			Action plan(if OFI or NC)		Notes
		Comply	OFI	NC	Improvements Needed (OFI)	Corrective Action Needed (NC)	Objective evidence and comment
<b>Clause 4 - Context of the Organization</b>							
4.1.1	<b>Understanding the organization and its context</b> Did the organization determine external and internal issues relevant to its purpose?? e.g., in minutes of meetings, strategic analysis, SWOT analysis etc						
4.1.2	Does the organization monitor and review information about internal and external issues relevant to its purpose?						
4.2.1	<b>Understanding the needs and expectations of interested parties</b> Does the organization determine relevant needs and expectations of the interested parties ? both current and potential, that are relevant to the areas of opportunity and the innovation management system;(Needs and expectations can be stated or unstated)						
4.2.2	Does the organization determine which of these needs, expectations and requirements will be addressed through the innovation management system?						
	<b>Determining the scope of the innovation management system</b> Innovation intent						

4.Context of the Organization

5.Leadership

6.Planning

7.Support

8.Operation

9.I ... +

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## Appendix 5: Gap Analysis Report (Sample)

- Planning
- Support
- Operation
- Performance evaluation
- Improvement

### 4. Gap Analysis Summary Table

A structured gap analysis based on ISO clause numbers is crucial for both evaluating adherence and for the upcoming implementation of an Innovation Management System (IMS). To make sure that the gap analysis addresses and covers all the section of ISO 56001 standard, we choose to adapt the same ISO clause numbers. Each clause represents a specific requirement (4. Context Of the Organization,5. Leadership ,6. Planning,7. Support ,8. Operation,9. Performance Evaluation And 10. Improvement). Also, The same for the Sub-Clauses.

ISO 56001 Clause	Requirement	Current Practice	Gap Identified	Priority (H/M/L)	Recommendations	Responsible Party
4.1	Understanding the organization and its context	Environmental scan is informal, not documented	No formal context analysis process	High	Implement a SWOT/PEST-based environmental scanning framework	Top Management
4.2	Understanding the needs and expectations of interested parties	Stakeholder expectations are not consistently captured	No structured stakeholder analysis	High	Conduct stakeholder mapping and engagement plan	Top Management
4.3	Determining the scope of the IMS	Scope is undefined	IMS scope not documented	High	Define and document the IMS scope	IMS Implementation Team
5.1	Leadership and commitment	Top management supportive but no formal leadership structure	Lack of formalized leadership roles	High	Establish an innovation steering committee	Top Management
5.2	Innovation policy	No formal innovation policy exists	Policy is missing	High	Develop and approve an innovation policy	Top Management
6.1	Actions to address risks	Risk management is ad hoc	No systematic approach to	Medium	Develop a risk management	Innovation Manager

## Appendix 6: Training Plan (Sample)

	<b>Training Plan (IMS) Implementation</b>	Ref	IMS /013
		Revision N°	1.0
		Date	09/06/2025

### 5.0 Training Program:

Weeks	Training Theme	Explanation	Objective	Experts	Schedules
Week 1	<b>Introduction to Innovation</b>	Provides a foundation by defining innovation, its types (product, process, business model), and its importance in competitiveness and growth.	Build a common understanding of what innovation is and why it matters to the organization.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>Innovation Management System (IMS)</b>	Introduces a structured approach to managing innovation. Including IMS system components, benefits, and continuous improvement.	Familiarize participants with the structure, purpose, and benefits of implementing an IMS.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>Workshop + Case Study</b>	A practical, interactive session where participants analyze a real or simulated IMS case and apply concepts in group exercises.	Reinforce learning through hands-on application of IMS concepts in real or simulated scenarios.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
Week 2	<b>Innovation Strategy, Policy, Objectives</b>	Explains the innovation strategy, policy and objectives and how it is aligned with business goals.	Equip participants with knowledge of MAZAM current innovation, policy, strategy and objectives.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>Innovation Process</b>	Describes the step-by-step flow of innovation activities: from idea generation to implementation and feedback.	Help participants understand and manage MAZAM innovation process systematically.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
Week 3	<b>Innovation Best Practices</b>	Shares tools, methods, and success factors that leading organizations use to foster innovation.	Introduce proven tools, frameworks, and cultural practices to support innovation excellence.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>Identification of Innovation Project</b>	Teaches how to identify, prioritize, and define innovation initiatives using tools like SWOT, trend analysis, and opportunity mapping.	Enable participants to recognize innovation opportunities and initiate structured projects.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
Week 4	<b>Application of IMS</b>	Focuses on the practical integration of IMS into the organization, including roles, documentation, workflows, and performance monitoring.	Guide participants in applying IMS principles in daily operations and innovation activities.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>Ongoing Project</b>	Reviews active innovation initiatives, offering peer feedback, identifying challenges, and sharing lessons learned.	Support active project development and create a feedback loop for continuous improvement.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h
	<b>New Opportunities</b>	Encourages exploration of emerging trends, market needs, and technology to spark future innovation projects and build a sustainable pipeline.	Inspire participants to identify and prioritize future-focused innovation opportunities.	Innovation Manager/ Consultant	Tuesday/ Thursday 14h

Consultant  
Jawher Ouni