



RESEARCH ARTICLE

# The Integrated Management System ISO Audit Benefits Over Individual ISO Audits

Rohit Kenge

## ABSTRACT

The research study intends to analyse the effectiveness of the Integrated Management System over an individual management system or ISO audits like ISO45001:2018, ISO 14001:2015, and ISO 9001:2015. We prepared the hypothesis model to understand the IMS effectiveness over individual standards or management systems during the ISO audits at the company. We used the quantitative research technique with independent variable as IMS and dependent variable as operation performance evaluated during ISO audit. We prepared questionnaires to check the improvement of some key objectives of the company after the IMS application. The questionnaires were circulated among a sample of the 150 employees working in the company of 10,000 employee population. We received 110 responses. We concluded from the above study that IMS helps to save repetitive documentation time, improve synergy between different auditing systems, audit efficiency, and final customer trust with satisfaction.

**Keywords:** Integrated management system, ISO 45001:2018, ISO 14001:2015, ISO 9001:2015, ISO audits

## INTRODUCTION

### Background

Organizations improve their safety, environment, and quality management performance through management systems. These management systems are certified with the ISO 45001- an occupational health and safety standard, ISO 14001-the environment standard, and ISO- 9001 a quality standard respectively (Jim Wilber, 2020). As many companies are dealing with one-plus management systems, this builds the question - Can companies club the standards to take the benefit of current synergies between them and is it effective over the separate management systems? (ISO Consultant Kuwait, 2019).

### Definitions

a. ISO 45001:18001: ISO 45001 is the occupational health and safety standard practiced to safeguard employees and all other people entering an organization from accidental injuries, non-

repairable harm, and diseases by control of elements that could probably lead to incidents. Also, this ISO 45001 standard is designed to cover all current occupational health and safety standards including OHSAS 18001, ILO labour standards, and other required safety rules (NQA, 2020).

b. ISO 14001:2015: ISO 14001 standards are built by the ISO in 1996 to guide the environmental management system (British Assessment, 2019). Any company that wants to improve its

---

Plant Head, Legrand India Private Limited, Nasik, Maharashtra, India

Email id: rohit.kenge@gmail.com

**How to cite this article:** Kenge, R. (2023). The Integrated Management System ISO Audit Benefits Over Individual ISO Audits. *Optimization*, 15(1): 38-48.

**Source of support:** Nil

**Conflict of interest:** None

---

operations to better control its impact on the environment may adopt it (You matter, 2020).

- c. ISO 9001:2015: ISO 9001 is a standard for a quality management system practiced internationally. Company's practice the standard to show their ability to produce products and required services that complete customer needs (ASQ, 2020).
- d. IMS: Integrated Management System- IMS is a single management system built to manage multiple standards like safety, environment, and quality at a time. A good IMS eliminates the unwanted obstacles and excess work of multiple systems. It combines all the audit processes to cover all requirements for individual standards simultaneously (Pegasus, 2016).

## RESEARCH OBJECTIVE

The main objective of this research paper is to analyse the Integrated Management System's effectiveness on the company performance over separate management systems.

## REVIEW OF LITERATURE

### ISO 45001:18001

Every day, preventable accidents due to unsafe workshop situations result in the thousands of workers fatality (ISO Update, 2018). ILO says that 2.7 million-plus fatality happens worldwide due to incidents at the workshop (ISO, 2018). ISO 45001 provides a breakthrough on the above issues by providing a single window (NQA, 2021). ISO 45001:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance. ISO 45001:2018 is applicable to any organization that wishes to establish, implement and maintain an OH&S

management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities. ISO 45001:2018 helps an organization to achieve the intended outcomes of its OH&S management system. Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include:

- a) Continual improvement of OH&S performance
- b) Fulfilment of legal requirements and other requirements
- c) Achievement of OH&S objectives

ISO 45001:2018 is applicable to any organization regardless of its size, type, and activities. It is applicable to the OH&S risks under the organization's control, considering factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties. ISO 45001:2018 does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system. ISO 45001:2018 enables an organization, through its OH&S management system, to integrate other aspects of health and safety, such as worker wellness/wellbeing. ISO 45001:2018 does not address issues such as product safety, property damage or environmental impacts, beyond the risks to workers and other relevant interested parties (Junghyun Lee *et al.*, 2020, p. 418-424) ISO 45001:2018 can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization's OH&S management system and fulfilled without exclusion.

### ISO 45001 changes compared to OHSAS 18001

- Context of the organization (Clause 4.1): The organization shall determine internal and external

**Table 1:** Plan-Do-Check-Act Cycle in ISO 45001:2018 with respective clauses

		Plan			Do	Check	Act
4 Organization Context	5 Leadership Parameters	6 Objectives Planning	7 Management Support	8 Company Operations	9 Performance Check	10 Continual Improvement	
4.1 Study of the organization context	5.1 Commitment of Leader	6.1 Risks and opportunities finding and actions over it	7.1 Operational Resources	8.1 Company planning of operation and its control	9.1 Performance review, data collection, analysis, and check	10.1 NC with corrective action over it	
4.2 Study of the needs and expectations, interested parties	5.2 OH&S Policy	6.2 OH&S objectives with achievement plan	7.2 Skills and Competence	8.2 Preparations in case of emergency	9.2 Audit by internal teams	10.2 Consistent improvement	
4.3 ISO 45001 scope determination	5.3 Organization structure as per roles & authorities		7.3 Operational awareness		9.3 Review by management		
4.4 OH&S MS			7.4 Business Communication				
			7.5 Documentation of the information				

issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s) of its OHS management system.

- Understanding the needs and expectations of workers and other interested parties (clause 4.2): Interested parties are workers, suppliers, subcontractors, clients, regulatory authorities.
- Risk and opportunities (Clauses: 6.1.1, 6.1.2.3, 6.1.4): Companies are to determine, consider and, where necessary, take action to address any risks or opportunities that may impact (either positively or negatively) the ability of the management system to deliver its intended results, including enhanced health and safety at the workplace.
- Leadership and management commitment (Clauses: 5.1) has stronger emphasis on top management to actively engage and take accountability for the effectiveness of the management system.
- Planning: (clause 6)

**Scope of ISO 45001:2018**

The scope of the ISO 45001:2018 in an organization is (PECB, 2018):

1. Provision of a healthy and safe work area (BSI Group, 2018)
2. Proactive prevention of an injury at work
3. Remove hazards, reduce risks, and identify opportunities at OH&S
4. Comply with the legal requirements and fulfil objectives of OH&S

**Clauses of ISO45001:2018**

ISO 45001 follows the systematic PDCA cycle approach for continual improvements in the OH&S through its clauses as shown in the Table 1 (Bureau veritas, 2020).

**ISO 14001:2015**

ISO 14001 standard guides on the waste reduction, resource optimum utilization, and reuse of resources. ISO 14001:2015 Standard extended its scope by

demanding an analysis of internal and external issues impacting the environmental management service (EPA, 2020). It also asks to strengthen the commitment of top managers by aligning the EMS with the strategic goals of the company with clear communication (BSI GROUP, 2020). ISO 14001:2015 specifies the requirements for an environmental management system that an organization can use to enhance its environmental performance. ISO 14001:2015 is intended for use by an organization seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability. ISO 14001:2015 helps an organization achieve the intended outcomes of its environmental management system, which provide value for the environment, the organization itself and interested parties. Consistent with the organization’s environmental policy, the intended outcomes of an environmental management system include:

- Enhancement of environmental performance
- Fulfilment of compliance obligations
- Achievement of environmental objectives

ISO 14001:2015 is applicable to any organization, regardless of size, type, and nature, and applies to the environmental aspects of its activities, products, and services that the organization determines it can either control or influence considering a life cycle perspective. ISO 14001:2015 does not state specific environmental performance criteria. ISO 14001:2015 can be used in whole or in part to systematically improve environmental management. Claims of conformity to ISO 14001:2015, however, are not acceptable unless all its requirements are incorporated into an organization’s environmental management system and fulfilled without exclusion (Massoud, 2010. p-1884-1887).

### Scope of ISO 14001:2015

The scope of the ISO 14001:2015 in an organization is (Johan Nolan, 2016):

**Table 2: Plan-Do-Check-Act Cycle in ISO 14001:2015 with respective clauses**

		Plan			Do	Check	Act
4 Organization Context	5 Leadership Parameters	6 Objectives Planning	7 Management Support	8 Company Operations	9 Performance Check	10 Continual Improvement	
4.1 Study of the organization context	5.1 Commitment of Leader	6.1 Risks and opportunities finding and actions over it	7.1 Operational Resources	8.1 Company planning of operation and its control	9.1 Performance review, data collection, analysis, and check	10.1 NC with corrective action over it	
4.2 Study of the needs and expectations, interested parties	5.2 Quality Policy	6.2 Quality objectives with achievement plan	7.2 Skills and Competence	8.2 Preparations in case of emergency	9.2 Audit by internal teams	10.2 Consistent improvement	
4.3 ISO9001 scope determination	5.3 Organization structure as per roles & authorities		7.3 Operational awareness		9.3 Review by management		
4.4 QMS			7.4 Business Communication				
			7.5 Documentation of the information				

1. Allowing the environmental value for the interested parties in an organization
2. Environment performance improvements (SEASPANCORP, 2020)
3. Achievement of all compliance actions
4. Achievement of organizational goals set for the environment

**Clauses of ISO14001:2015**

ISO 14001 follow the PDCA cycle approach for continual improvements in the EMS through standard clauses as shown in the Table 2 (IMSM, 2019).

**ISO 9001:2015**

In 2014 the ISO studied some cases in more than 25 nations companies that adopted ISO 9001. This study explained that the ISO 9001 applications benefits had been internal such as increased customer happiness, engaged and empowered employees, enhanced quality of the products, efficient processes, and reduced quality risk through continual improvements (9001

Simplified, 2021). ISO 9001:2015 specifies requirements for a quality management system when an organization:

- a) Needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and
- b) Aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of ISO 9001:2015 are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides (Sampaio, 2009).

**The ISO 9000 series seven Quality Management Principles (QMP)**

The seven quality management principles are explained below in Table 3.

**Table 3:** 7 Quality Management Principles

QMP 1	Customer Focus	Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.
QMP 2	Leadership	Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization’s objectives.
QMP 3	Engagement of People	People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization’s benefit.
QMP 4	Process Approach	A desired result is achieved more efficiently when activities and related resources are managed as a process.
QMP 5	Improvement	Improvement of the organization’s overall performance should be a permanent objective of the organization.
QMP 6	Evidence-Based Decision Making	Effective decisions are based on the analysis of data and information.
QMP 7	Relationship Management	An organization and its external providers (suppliers, contractors, service providers) are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

**Evolution of Standard**

The ISO 9000 standard is continually being revised by standing technical committees and advisory groups, who receive feedback from those professionals who are implementing the standard as shown in Table 4.

**Table 4:** Evolution of ISO 9001 standard

Year	Edition of ISO 9001
1987	1st Edition
1994	2nd Edition
2000	3rd Edition
2008	4th Edition
2015	5th Edition

**Scope of ISO 9001:2015**

The scope of the ISO 9001:2015 in an organization is:

1. Achievement of customer satisfaction without considering the nature and size the company (Richard Keen, 2021)
2. Compliance with all the required legal needs
3. A justification for not applicable clauses (MAS Quality, 2018)
4. Achievement of organizational objectives set for quality management

**Clauses of ISO9001:2015**

ISO 9001 follow the PDCA cycle approach for continual improvements in the QMS through standard clauses as shown in the Table 5 (Aura Quality Management, 2016).

**IMS (Integrated Management System)**

IMS is an integrated management system that integrates all company management systems or standards with the single smart system (Timothy Wood come, 2016). This integration saves repeated documentation time and creates synergy due to considerable similarities in defined 10 clauses (Quality Mag, 2020). Figure 1 shows the probable integration of the safety, environmental, and quality standards.

**Table 5:** Plan-Do-Check-Act Cycle in ISO 9001:2015 with respective clauses

Plan		Do	Check	Act
4 Organization Context	5 Leadership Parameters	8 Company Operations	9 Performance Check	10 Continual Improvement
4.1 Study of the organization context	5.1 Commitment of Leader	8.1 Company planning of operation and its control	9.1 Performance review, data collection, analysis, and check	10.1 NC with corrective action over it
4.2 Study of the needs and expectations, interested parties	5.2 Environmental Policy	8.2 Preparations in case of emergency	9.2 Audit by internal teams	10.2 Consistent improvement
4.3 ISO14001 scope determination	5.3 Organization structure as per roles & authorities		9.3 Review by management	
4.4 EMS				
	6 Objectives Planning			
	6.1 Risks and opportunities finding and actions over it			
	6.2 Environmental objectives with achievement plan			
	7 Management Support			
	7.1 Operational Resources			
	7.2 Skills and Competence			
	7.3 Operational awareness			
	7.4 Business Communication			
	7.5 Documentation of the information			



**Figure 1:** Integrated Management System (QMSUK, 2020)

**Comparison of ISO standard clauses**

We summarised the requirement of the clauses for all ISO standards to check the similarity as shown in the Table 6.

From the above Table 6, we understand that there is a major similarity in the safety, environmental, and quality ISO audits. On a similar basis, we may club these audits to one Integrated Management System ISO audit. Further, we are going to analyse the Integrated Management System’s effectiveness on the company performance over separate management systems during the ISO audits.

**Research Hypothesis Model**

We built the following research hypothesis model as shown in Figure 2 to analyse the IMS effectiveness

**Table 6:** Comparison of ISO standard clauses

Clauses	ISO 45001:2018	ISO 14001:2015	ISO 9001:2015
4 Organization Context	Yes	Yes	Yes
4.1 Study of the organization context	Yes	Yes	Yes
4.2 Study of the needs and expectations, interested parties	Yes	Yes	Yes
4.3 Scope determination	Yes	Yes	Yes
4.4 MS	Yes	Yes	Yes
5 Leadership Parameters	Yes	Yes	Yes
5.1 Commitment of Leader	Yes	Yes	Yes
5.2 Policy	Yes	Yes	Yes
5.3 Organization structure as per roles and authorities	Yes	Yes	Yes
6 Objectives Planning	Yes	Yes	Yes
6.1 Risks and opportunities finding and actions over it	Yes	Yes	Yes
6.2 Objectives with achievement plan	Yes	Yes	Yes
7 Management Support	Yes	Yes	Yes
7.1 Operational Resources	Yes	Yes	Yes
7.2 Skills and Competence	Yes	Yes	Yes
7.3 Operational awareness	Yes	Yes	Yes
7.4 Business Communication	Yes	Yes	Yes
7.5 Documentation of the information	Yes	Yes	Yes

Table 6 contd....

Clauses	ISO 45001:2018	ISO 14001:2015	ISO 9001:2015
8 Company Operations	Yes	Yes	Yes
8.1 Company planning of operation and its control	Yes	Yes	Yes
8.2 Preparations in case of emergency	Yes	Yes	Yes
9 Performance Check	Yes	Yes	Yes
9.1 Performance review, data collection, analysis, and check	Yes	Yes	Yes
9.2 Audit by internal teams	Yes	Yes	Yes
9.3 Review by management	Yes	Yes	Yes
10 Continual Improvement	Yes	Yes	Yes
10.1 NC with corrective action over it	Yes	Yes	Yes
10.2 Consistent improvement	Yes	Yes	Yes

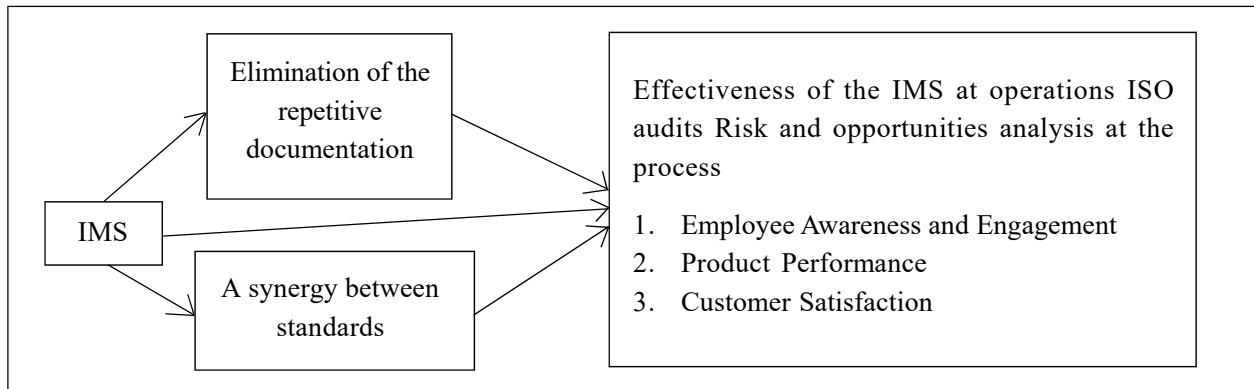


Figure 2: Research Hypothesis Model

over individual standards during the ISO audits at the company. From this “Research Hypothesis Model”, we built the Hypothesis as shown in Table 7.

## RESEARCH METHODOLOGY

### Data Collection

We used the quantitative research technique with,

- a. Independent Variable: IMS
- b. Dependent Variable: Operation Performance judged during ISO audit

We prepared questionnaires to check the improvement of some key objectives of the company

after IMS application. The questionnaires were circulated among a sample of the 150 employees working in the company of 10,000 employee population. We received 110 responses. We prepared the following correlation and regression to analyse the effects of IMS application on company performance as shown in Table 8. We verified further the hypothesis and analysed it as shown in Table 9. The Hypothesis test results are shown in the Table10.

### RESULTS

We analysed the Hypotheses as mentioned in Table 9 and Table10.



**Table 7:** Hypothesis built

Hypothesis	Description	Path
H1	IMS eliminates the repetitive documents for individual ISO standards	IMS → Eliminations of the repetitive documentation
H2	IMS improves synergy between the different ISO standards	IMS → The synergy between the different ISO standards
H3	IMS saves the time and improves operation performance through overall ISO audit process	IMS → Operations performance at ISO audit

**Table 8:** Correlation and regression of IMS and its effectiveness at operations ISO audit

Variable	Mean	SD	1	2	3	4	5
Risk and opportunities analysis at the process	4.39	529	1				
Employee awareness and engagement	4.27	502	296**	1			
Product performance	4.09	532	332**	0.012	1		
Customer satisfaction	3.99	589	346**	60**	34**	1	
Elimination of the repetitive documentation	4.26	604	349**	23**	52**	432	1

Note: \* p < 0.05, \*\* p < 0.01

**Table 9:** Hypothesis test

Path	Model I Standard Coefficient	Model II Standard Coefficient	Model III Standard Coefficient	Model IV Standard Coefficient	Conclusion
IMS → Eliminations of the repetitive documentation	7.9***	7.9***	0.56***	24**	Partial Mediation
IMS → The synergy between the different ISO standards	0.27***	0.49***	0.59***	12**	Partial Mediation
IMS → Operations performance at ISO audit	0.29***	0.31***	0.59***	13**	Partial Mediation

**Table 10:** Hypothesis test results

IMS R2 ( $\Delta R^2$ )		32.01(0.33)
F-statistic		110.92
Eliminations of the repetitive documentation R2 ( $\Delta R^2$ )	0.121(0.10)	0.122(0.09)
F-statistic	16.44	15.62
The synergy between the different ISO standards R2 ( $\Delta R^2$ )	0.021(0.020)	0.17(0.172)
F-statistic	10.09	19.09
Operations performance at ISO audit ( $\Delta R^2$ )	0.22(0.209)	0.219(0.20)
F-statistic	26.32	44.52

Notes: \*\* p < .01, \*\*\* p < 0.001

1. Hypothesis one confirms that IMS eliminates the repetitive documentation during the ISO audits saves time significantly with  $\beta=0.19$ . IMS improves operations performance with  $\beta=0.32$ .
2. Hypothesis two confirms that IMS improves synergy between the different ISO standards significantly with  $\beta=0.28$  and Operations performance with  $\beta=0.45$ .

Hence, IMS helps to save repetitive documentation time, improve synergy between different auditing systems, audit efficiency, and final customer trust with satisfaction.

## CONCLUSION

We conclude based on the above empirical research studies that IMS significantly improves the ISO audit performance over individual ISO audits. IMS helps to save repetitive documentation time, improve synergy between different auditing systems, audit efficiency, and final customer trust with satisfaction.

## REFERENCES

- 9001 Simplified. (January 14, 2021). Reasons for ISO 9001. Retrieved from <https://www.9001simplified.com/learn/reasons-for-iso-9001.php>
- ASQ. (2020). ISO 9001. Retrieved from <https://asq.org/quality-resources/iso-9001>
- Aura Quality Management. (November 14, 2016). Top-10-clauses-iso-90012015. Retrieved from <http://www.auraqualitymanagement.com/blog/top-10-clauses-iso/>
- British Assessment. (August 22, 2019). What-are-the-iso-14001-requirements? Retrieved from <https://www.british-assessment.co.uk/insights/what-are-the-iso-14001-requirements/>
- BSI GROUP. (2020). ISO-14001-Environmental-Management. Retrieved from <https://www.bsigroup.com/en-IN/ISO-14001-Environmental-Management/>
- BSI Group. (March 2018). ISO-45001-guide-final. Retrieved from <https://www.bsigroup.com/globalassets/localfiles/en-in/resources/ISO%2045001/iso-45001-guide-final-mar2018.pdf>
- Bureau veritas. (August 20, 2020). Understanding-iso-45001-clause-clause-guide. Retrieved from <https://certification.bureauveritas.com/magazine/understanding-iso-45001-clause-clause-guide>
- EPA. (2020). Learn-about-environmental-management-systems. Retrieved from <https://www.epa.gov/ems/learn-about-environmental-management-systems>
- IMSM. (December 16, 2019). What-are-the-10-clauses-of-iso-14001? Retrieved from <https://www.imsm.com/gb/news/what-are-the-10-clauses-of-iso-14001/>
- ISO Consultant Kuwait. (June 24, 2019). IMS Manual. Retrieved from <https://isoconsultantkuwait.com/2019/06/24/ims-manual-iso-90012015-iso-140012015-and-iso-450012018/>
- ISO Update. (February 06, 2018). Understanding-context-organization-iso-45001. Retrieved from <https://isoupdate.com/resources/understanding-context-organization-iso-45001/>
- ISO. (March 12, 2018). ISO-45001-occupational-health-and-safety. Retrieved from <https://www.iso.org/iso-45001-occupational-health-and-safety.html>
- Jim Wilber. (June 17, 2020). What exactly is ISO certified and what does it mean? Retrieved from <https://www.meadmetals.com/blog/what-exactly-is-iso-certified-and-what-does-it-mean>
- Johan Nolan. (February 01, 2016). How-to-determine-the-scope-of-the-ems-according-to-ISO? Retrieved from <https://advisera.com/14001academy/blog/2016/02/01/how-to-determine-the-scope-of-the-ems-according-to-iso-140012015/>
- Lee, J., Jung, J., Yoon, S.J. and Byeon, S.H. (2020). Implementation of ISO45001 Considering Strengthened Demands for OHSMS in South Korea: Based on Comparing Surveys Conducted in 2004 and 2018. *Safety and Health at Work*, 11(4): 418-424, ISSN 2093-7911, <https://doi.org/10.1016/j.shaw.2020.08.008>.
- MAS Quality. (February 10, 2018). ISO 9001 determining-the-scope-of-the-quality-management-system. Retrieved from <https://www.masquality.com/our-iso-9001-blog/iso-90012015-determining-the-scope-of-the-quality-management-system>
- May A. Massoud, Fayad, R., Kamleh, R. and El-Fadel, M. (2010). Environmental Management System (ISO 14001) Certification in Developing Countries:

- Challenges and Implementation Strategies. *Environmental Science & Technology*, 44(6): 1884-1887. doi: 10.1021/es902714u
- NQA. (2020). ISO 45001. Retrieved from <https://www.nqa.com/en-in/certification/standards/iso-45001>
- NQA. (2021). NQA-ISO-45001-Implementation-Guide. Retrieved from <https://www.nqa.com/medialibraries/NQA/NQA-Media-Library/PDFs/NQA-ISO-45001-Implementation-Guide.pdf>
- PECB. (March 16, 2018). ISO-45001-occupational-health-and-safety-management-system-requirements. Retrieved from <https://pecb.com/whitepaper/iso-45001-occupational-health-and-safety-management-system-requirements>
- Pegasus. (March 29, 2016). Integrated-management-systems-benefits-and-constraints. Retrieved from <https://www.pegasuslegalregister.com/2016/03/29/integrated-management-systems-benefits-and-constraints/>
- QMSUK. (July 07, 2020). What is an integrated management system? Retrieved from <https://www.qmsuk.com/news/what-is-an-integrated-management-system>
- Quality Mag. (May 09, 2020). Using-an-integrated-management-system-in-your-organization. Retrieved from <https://www.qualitymag.com/articles/using-an-integrated-management-system-in-your-organization>
- Richard Keen. (February 03, 2021). How-to-write-your-scope-for-ISO-9001? Retrieved from <https://www.iso-9001-checklist.co.uk/4.3-how-to-write-your-scope-for-ISO-9001-with-7-examples.htm>
- Sampaio, P., Saraiva, P. and Guimaraes Rodrigues, A. (2009). ISO 9001 certification research: questions, answers and approaches. *International Journal of Quality & Reliability Management*, 26(1): 38-58. <https://doi.org/10.1108/02656710910924161>
- SEASPANCORP. (March 03, 2020). ISO-140012015-SCOPE. Retrieved from <https://www.seaspancorp.com/wp-content/uploads/ISO-140012015-SCOPE.pdf>
- Timothy Woodcome. (October 26, 2016). What-integrated-management-system? Retrieved from <https://www.qualitydigest.com/inside/iso/what-integrated-management-system-102616.html>
- You matter. (March 12, 2020). Definition ISO 14001 standard CSR definition. Retrieved from <https://youmatter.world/en/definition/definitions-iso-14001-standard-csr-definition/>