MANAGEMENT SYSTEM EXCELLENCE IN MANUFACTURING AND SERVICE INDUSTRIES MSME (MICRO SMALL AND MEDIUM SIZED ENTERPRISES) SECTOR IN BANGALORE

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MANAGEMENT SYSTEM EXCELLENCE IN MANUFACTURING AND SERVICE INDUSTRIES MSME (MICRO, SMAL, AND MEDIUM SIZED ENTERPRISES) SECTOR IN BANGALORE

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Dedication

I am dedicating this work to my family, my gurus, the divine energy that is the guiding light for me and to my Grandfather Late Annam Lakshminarayana Setty who I admire for his business acumen, success, hard work, and care for family wellbeing.

Acknowledgments

I am ever grateful to my parents, T.B. Balasubramanian and B. Padma, for cultivating the habit of learning, a sense of responsibility, proactive thinking approach, and a solution-based mindset since my childhood, my wife Radha, the pillar of support in all aspects of my life, who has given me the freedom and space to explore every opportunity I pursue having the confidence in me and assisting me in pursuing this program. My Children Sidharth and Sooraj inspire me daily to give them the best of what is possible from me; what better assets can be passed on than knowledge and experience to develop their capabilities. My Friends gave me the support and confidence that I could do this program when I had a cloud of uncertainties hanging over me. I thank the survey respondents for taking the time to respond to my survey and interviews. My gurus have taught me various insights into progress across the walk of life. A big thanks to dr. Anna Provodnikova for her feedback, support, and patience throughout this program milestone and submission of this thesis.

ABSTRACT

MANAGEMENT SYSTEM EXCELLENCE IN MANUFACTURING AND SERVICE

INDUSTRIES MSME (MICRO, SMALL, AND MEDIUM SIZED ENTERPRISES)

SECTOR IN BANGALORE

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Globally, management systems standards have helped many organizations adhere to the

commonly accepted practices in business operations, resulting in increased growth and

productivity and significantly higher customer satisfaction and retention. Apart from

benefiting from the qualification of business, opening opportunities to enter organizations

or markets that require certification is the prerequisite to conducting the business. This

thesis will study the management system excellence – implementation and sustenance of

management systems in manufacturing and service industries' MSME (micro, small, and

 \mathbf{v}

medium-sized enterprises) sector in Bangalore and its impact on business. With the challenge of low literacy, unskilled workforce, limited resources, multiskilling, unorganized processes, and budget restrictions, this research project will oversee how the enterprises have managed still implement the management system; it will show the challenges the top management/business leaders faced, their choices and decisions as well as lessons learned. The study results and learnings will give confidence and hope and help implement and sustain such management systems in all MSME industries in the future. Bangalore is a hub of opportunities, and this study focuses on how management systems can assist the MSME industries to excel in their business operations.

Research, Surveys, Discussions, and interviews were conducted using online tools and inperson discussions with individuals working in distinct roles within the MSME organization.

Management system excellence in implementation and sustenance assists organizations to impact both their operations and business prospects as it gives them the eligibility for various prerequisites applied in business opportunities that are managed by MSME, and in general there are numerous benefits in a management system, such as

- establishing business rules.
- enabling a governance framework.
- practical policy setting.
- less miscommunication.
- thoughts on succession planning.
- transitional management.

- focus on marketing.
- Prerequisites in government contracts.
- satisfying client requirements.
- enabling due diligence.
- systematic way for business review.
- knowledge management.
- documentation management.
- resource management.

TABLE OF CONTENTS

List of Tables		X
List of Figure	S	xi
CHAPTER I:	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Research Problem	
	1.3 Purpose of Research	
	1.4 Significance of the Study	
	1.5 Research Furpose and Questions	0
CHAPTER II:	REVIEW OF LITERATURE	10
	2.1 Theoretical Framework	10
	2.2 Management Systems	
	2.3 Deming Cycle Approach	
	2.4 Principles of Quality Management Systems	
	2.5 Establishment of the Management Systems	
	2.6 Discussion	
	2.7 Summary	71
CHAPTER III	I: METHODOLOGY	72
	3.1 Overview of the Research Problem	72
	3.2 Operationalization of Theoretical Constructs	
	3.3 Research Purpose and Questions	7 <i>3</i>
	3.4 Research Design.	
	3.5 Population and Sample	
	3.6 Participant Selection	
	3.7 Instrumentation	
	3.8 Data Collection Procedures.	
	3.9 Data Analysis	
	3.10 Research Design Limitations	
	3.11 Conclusion	
CHAPTER IV	7: RESULTS	87
	4.1.D. 1/2CG	0.7
	4.1 Results of Survey	8 /
	4.2 Research Question One: Research Questions for Business Leaders	gn
	4.3 Research Question Two: Research Questions for Managers and	50
	Employees	95
	4 4 Research Question Three: Interview Results	100

	4.5 Summary of Findings	106
	4.7 Conclusion	108
CHAPTER V:	DISCUSSION	112
	5.1 Discussion of Results	. 112
	5.2 Discussion of Research Question One	. 113
	5.3 Discussion of Research Question Two	116
	5.4 Discussion of Research Question Three	
	5.5 Discussion of Research Question Four	
	5.5 Discussion of Research Question Five	
	5.6 Discussion on comparative analysis on the next set of questions	
	5.7 Interview results	
	5.7.1 The best way to address organizational challenges in	
	management systems	124
	5.7.2 Which management systems are working well to help MSME	
	business?	. 127
	5.7.3 Best ways to align the employees to adopt and adhere to	
	management systems.	. 128
	5.7.4 Which phase of a management system do you want to	
	simplify in implementing and adhering to it?	. 129
		>
CHAPTER VI	: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS	134
	6.1 Summary	. 134
	6.2 Implications	136
	6.3 Recommendations for Future Research	. 138
	6.4 Conclusion	139
APPENDIX A	SURVEY COVER LETTER	142
APPENDIX B	INFORMED CONSENT	143
APPENDIX C	INTERVIEW GUIDE	144
REFERENCE	S	. 149

LIST OF TABLES

Table 1.1: Statistics of MSME industries as per business size	1
Table 4.1: Response to Distribution of Data	87
Table 4.2 Companies and their employee sizes	88
Table 4.3 Results of defining a successful management system	90
Table 4.4 Results for factors that influence the effective implementation of the management system	91
Table 4.5 Results for adequate sustenance of the management system	92
Table 4.6 Results for factors that influence the decision on which other management systems are helpful to your business	93
Table 4.7 Results show that the challenges your industry faces are addressed with the assistance of management systems.	94
Table 4.8 Results for challenges you faced during the time you were implementing the management system	95
Table 4.9 Results for options used to overcome those challenges	96
Table 4.10 Results of training participation	97
Table 4.11 Results for options that helped you to establish the effective management system	98
Table 4.12 Results for learnings as a management system implementor that you want to share with others	99
Table 4.13 Indicating a few narratives by respondents for themes that work best to address organizational challenges	100
Table 4.14 indicates that a few narratives by respondents for management systems are working well to help MSME businesses	102
Table 4.15 Indicating few narratives by respondents for ways to align the employees to adapt and adhere to management systems	103
Table 4.16 Indicating a few narratives by respondents for Which phase of a management system you want to simplify	104
Table 4.17 Indicates a few narratives by respondents for Results of the Framework to help management system execution.	105

LIST OF FIGURES

Figure 3.1 – google form survey link	77
Figure 3.1 – Google Meet – meeting link for interviews with business leaders of the organization.	80
Figure 4.1: Response to Distribution of data	88
Figure 4.2: MSME Industries Category Ratio sampled	89
Figure 4.3: Results of defining a successful management system	90
Figure 4.4: Results for factors that influence the effective implementation of the management system	91
Figure 4.5: Results for adequate sustenance of the management system	92
Figure 4.6 Results for the factor that influences the decision of which other management systems are helpful to your business	93
Figure 4.7 Results for challenges your industry faces are addressed with the assistance of management systems.	94
Figure 4.8 Results for challenges you faced during the time you were implementing the management system	96
Figure 4.9 Results for options used to overcome those challenges	96
Figure 4.10 Results of training participation	97
Figure 4.11 Results for options that helped you to establish the effective management system	98
Figure 4.12 Results learnings as a management system implementor that you want to share with others	99
Figure 4.13 Results of themes that work best to address organizational challenges	100
Figure 4.14 Examples of Results of Data Text Analyzer based on Narratives by participants	101
Figure 4.15 Examples of Results of management systems working well to help MSME business.	102
Figure 4.16 Examples of Results of ways to align the employees to adapt adherence to management systems	103
Figure 4.17 Examples of Results of Which phase of a management system you want to simplify	104
Figure 4.18 Examples of Results of Framework to help management system execution	105

CHAPTER I:

INTRODUCTION

1.1 Introduction

MSMED Act, 2006 for the Micro, Small and Medium Enterprises Development, enacted by the Honorable Government of India, defines MSME as micro, small, and medium enterprises (B. Yerram Raju, 2019) as Enterprises engaged in manufacturing, processing, or preserving goods as specified below (Jayalakshmi, 2019).

Table 1.1: Statistics of MSME industries as per business size

Classification	Manufacturing Enterprises	Service Enterprises
Micro	Rs. 2.5 million/ Rs. 25 lakhs	Rs. 1 million/ Rs. 10 lakhs
Small	Rs. 50 million/ Rs. 5 crores	Rs. 20 million / Rs. 2 crores
Medium	Rs. 100 million / Rs. 10 crores	Rs. 50 million / Rs. 5 crores

(Source: Msme.gov.in, 2019).

MSMEs are not just any tiny firms. 1.2 billion people worldwide are offered employment, which is almost one-third of the world's population who work in the informal sector, and small and large industries, retail, tourism, transportation, and construction, depend on MSME Services. But today, many sub-sectors within MSMEs face challenges in attaining their rightful market share, which will undoubtedly significantly impact their performance and future growth outlook. While some significant challenges are faced by such sub-sectors as construction, retail, etc., they still need to be inculcated and incorporated within the MSME ecosystem (Baral, 2013). Some of The Major Challenges Faced by The MSME Sector (Admin, 2022):

- 1) Regulatory issues
- 2) Infrastructure
- 3) Low productivity
- 4) Lack of innovation
- 5) Technical changes
- 6) Competition
- 7) Skills
- 8) Lack of professionalism
- 9) Lack of standardized practices

The experience of implementing management systems across multiple MSMEs shows how an organization manages the interrelated processes of its business to achieve its goals (ISO, 2011). These objectives can relate to several topics, including quality of service, product, performance of operational efficiency, environmental, occupational health, and safety in the workplace, and many more.

The system's complexity level will depend on each organization's specific context. For certain organizations, specifically the smaller ones, it may mean having strong direction from the business leaders, providing a clear expectation from each employee and how they contribute to the organization's overall objectives without extensive documentation. More complex businesses operating in highly regulated sectors may require extensive documentation and controls to fulfill their legal-statutory / regulatory obligations and meet the goals defined by the organization.

Such MSMEs can use management systems to have exposure and comply with the supply chain requirements to qualify themselves to compete competently. A methodology can be proposed to streamline how such management systems can be implemented leanly and make it less complex while preparing to comply with the requirements.

1.2 Research Problem

Management systems -their importance, benefits, and implementation methods have been well analyzed by various researchers in the past. However, many studies have not found situations like management system excellence in manufacturing and service industries' MSME (micro, small, and medium-sized enterprises) sector in Bangalore. The leadership approach in such enterprises like MSME - opens an opportunity for further research and deeper analysis of how such management systems can be implemented and, in turn, benefit society with higher quality products, a sustainable environment, and a safer and healthier workplace.

Management systems are a systematic process in which an organization plans how its interrelated processes are aligned, and their sequence of interactions enables the business to achieve its goals (ISO, 2011). These objectives can relate to several topics, including quality of service, product, performance of operational efficiency, information security, environmental, occupational health, and safety in the workplace, and many more.

Management systems are a sequence of processes that need to be integrated to achieve the organization's objectives and have specific negative perspectives, such as costly, exhaustive, excessive investment in training, the overhead of compliance management, resource consumption, non-value-added documentation, etc. (Gurus, 2022).

Due to the lack of suitable approaches, these questions demotivate organizations, managers, and leadership, especially in the MSME industries, to drop the idea of implementation and compliance to management systems, despite many authors advocating the importance of management systems (Bhasin, 2015). Leadership of business and processes should reflect on issues that have challenged them and investigate possibilities that can make them realize the benefits of management system compliance (Sashkin, 1993).

1.3 Purpose of Research

The research aims to explore management system excellence in the manufacturing and service industries MSME (micro, small, and medium-sized enterprises) sector in Bangalore.

For this reason, the research will not only focus on the challenges and shortfalls that make management systems fail, but it will address the various possible actions that can be taken to make management systems excel in the MSME sector in Bangalore.

This research aims to address the following questions:

- 1. What difficulties and challenges have the leaders encountered in implementing the management systems in MSME organizations?
- 2. How have the leaders communicated with the relevant stakeholders and their strategies to implement the management systems?
- 3. What actions have been put in place to realize the benefits of the management systems

4. What methodology has streamlined the implementation and excellence of such management systems in the MSME sector in Bangalore?

This shall lead to the following objectives:

- 1. Evaluate the management systems followed in the MSMEs sectors in Bangalore.
- 2. Find management systems linked with ISO standards and how they can assist in overcoming challenges faced by the MSME sector.
- 3. Find out How the management system excellence has proven for various MSMEs in Bangalore, both in the manufacturing and service sector

This study should improve the understanding of how management systems are implemented in a streamlined manner amidst all challenges faced by MSMEs, and this study should be valuable to organizations' leaders and applicable to industry practitioners and research.

1.4 Significance of the Study

MSME organizations acknowledge that management systems and their compliance significantly impact their business, so there is a hesitation to identify the significance of this impact. Adopting management systems unquestioningly as they are used by another organization or as provided by a professional they have hired to assist them in accomplishing compliance with the management system results in burdening the organization to sustain the system.

Further, organizations lose the capability to industranding the process requirements defined versus what is followed, apart from relying on the result of a certification, which is not necessarily the accurate representation of the organization's ideology towards the

implementation of the management system and, in some instances even if understood and implemented, if the knowledge transition is not passed on to others in the organization, the organization end up having the talent risk in practical implementation.

Bangalore is a hub of opportunities as businesses expand or the industry grows. Still, there is no credible mechanism to address the attrition or transition of existing persons to manage the process, due to which the processes that are operated become persondependent rather than system-dependent. So, this research will focus on overcoming the talent risk that impacts the management systems implemented in the MSME industries.

Management systems are a concept that can potentially solve the issue of systematic process management in most organizations. Since a lot of the investment is needed for technology integration or process automation, which do not yield immediate results, it is challenging whether the MSME businesses can afford it; this results in poor process management in an organization. The focus area of this study is to provide a framework that effectively demonstrates the adoption of the management system in MSME organizations. No academic knowledge has a concept of teaching such management systems to students or incubation hubs to assist MSME organizations in learning such concepts. This means that organizations and businesses have the task of identifying professional assistance or investing a considerable amount of time and effort in learning such concepts and implementing them in the organizations and training persons to adopt the system they have no exposure to in prior work.

1.5 Research Purpose and Questions

The objective of this research is to study, analyze, highlight, and address the Management System Excellence In Manufacturing And Service Industries MSME (Micro, Small, And Medium Sized Enterprises) Sector In Bangalore and provide a solution framework for establishing and implementing the management systems that MSME organizations can effectively implement, lead and scale businesses successfully.

- 1) A profound research on the methodology adopted for implementation in the business along with the impact on the effectiveness of implementing the management system to MSME industries in Bangalore.
- 2) This research will work towards creating a framework to help MSME industries in Bangalore build and effectively implement the management systems applicable to the nature of their processes, irrespective of their size.
- 3) This research and proposal would focus on how MSMEs can adopt effective ways to sustain management systems that can be excelled in their organizations.

As a part of the research related to the excellence of the management system in MSME organizations, the following will be involved in this study:-

- a) Describe the method for addressing the effective implementation of the applicable management systems.
 - b) Define the impact of implementing management systems in an organization.
- c) Define management systems best suited for the current MSME industry scenarios.

The questions that will be considered for assessing the above factors are as follows:

Research questions for Business leaders:-

Primary questions: -

- 1. What options as identified by the researcher defines a successful management system?
- 2. What options as identified by the researcher led to an effective management system implementation?
- 3. What options as identified by the researcher do you follow to ensure the organization's management system can be sustained?
- 4. What options as identified by the researcher enables you to decide which other management systems are helpful to your business?
- 5. What options as identified by the researcher are challenges in your industry are addressed with the assistance of management systems?

Research questions for Managers and Employees:-

Primary questions: -

- 1. What options as identified by the researcher are the challenges you faced while implementing the management system?
- 2. What options as identified by the researcher were used to overcome those challenges?
- 3. Were there any trainings that you attended during implementation / for sustence of the management system? Yes or No?
- 4. What options as identified by the researcher helped you establish an effective management system?

5. What options as identified by the researcher are learnings as a management system implementor do you want to share with others?

Follow-up and a secondary set of semi-structured questions for in-person or video conference interviews with all Business Leaders.

- 1. Management systems and what works best to address organization challenges.
- 2. Which management system category works well to help MSME business?
- 3. Best ways to align the employees to adopt and adhere to management systems.
- 4. Which phase of a management system do you want to simplify in implementing and adhering to it
 - 5. Solution Framework to help management system execution.

CHAPTER II:

REVIEW OF LITERATURE

2.1 Theoretical Framework

The paper's main objective is to evaluate the management systems followed in the MSME sectors in Bangalore. The second objective is to find a key management system linked with ISO standards and how it can assist in overcoming challenges faced by the MSME sector. The third objective is to discover how the excellence of the management system has been proven for various MSMEs in Bangalore, both in the manufacturing and service sectors (Nallaiyan, 2020).

MSMEs are critical in Bangalore, Karnataka, and India's economy. MSME development and growth, especially in manufacturing, are aligned with job creation, creating employment opportunities, and eradicating poverty. The MSMEs are widespread and have a massive presence in Bangalore.

Several regulatory issues have been identified over time, including problems like tax compliance and labor law changes, which have cost the MSME sector dearly. Some years back, specific labor reforms were attempted to make this sector more competitive. Still, they failed to improve things for MSMEs despite making them more competitive than larger firms (Team Lease, 2023). As a result of the reasons mentioned above, MSMEs face difficulty in compliance with these various regulations and compliance, resulting in an increasing burden on working capital - as overhead to manage the lack of adherence to such legal requirements.

In Bangalore, Karnataka, India, the infrastructure sector is vital because we are often called the 'world's back-office, as so much work is conducted overseas. IT Sector, online sales / E-Commerce, KPO, and BPOs have created more jobs in low-wage places like Bangalore and Karnataka, India (Team Lease, 2023).

MSMEs are not necessarily very productive; however, they perform more valuable tasks in a business supply chain. Retailers sell consumer goods to end-users at lower prices. MSMEs may be very effective only when it comes to being cost-efficient and can create high volumes at meager costs. However, given that their production is on a small scale with very thin margins, being less productive can put them at a disadvantage, especially when compared with larger firms (Bhat, 2020).

MSMEs are not innovative, and most products are based on outdated technologies. There is a severe lack of entrepreneurs in this sector, which has prevented it from adopting modern technologies and tools that have brought about significant changes in other sectors like e-commerce and call centers, resulting in struggling with outdated technology, less competent staff, and reduced productivity, especially when compared with larger firms (5paisa, n.d). There has been no shortage of technical changes, and most industries have undergone some form of change to remain competitive. As a result, MSMEs have had to deal with significant changes affecting their growth potential (5paisa, n.d).

Due to several factors, such as the rise of eCommerce and the advent of globalization, more prominent firms have forced MSMEs out of their markets. However, this is not new because MSMEs faced competition from year one but could fight it off

successfully compared to professional firms. MSMEs continue to face competition in many areas, including agricultural machinery, garments, and tourism (5paisa, n.d).

Regarding skills, MSMEs are far behind their counterparts in other parts of the world due to the dependency on informal workers, low pay, and less technical skills to help enhance productivity. The smaller MSME firms are forced to take up jobs that require standard/basic proficiency of skills, further affecting their progress in the long term. The skill gap is an issue that often hampers the sector's growth. Any sector's biggest strength is its human resources, provided it has adequate performance skills (hdfc, 2023). Usually, MSME players are underrated and lack recognition as one of a country's primary areas of economic well-being. It has lost its identity as the producer of traditional products and acting as a supplier of big and medium-sized industries. This has also led to the industry running by experience, not expertise. Unlike MSME sectors of other developed and developing countries, the Indian story is different. Although the industry absorbs a considerable percentage of workforce resources most of the time, they do not have adequate skills or techniques to perform. They often serve a routine job; hence, innovation is absent from productivity. Few MSME players are willing to spend some of their profit on training and development. Over time, this recurring problem became an issue and mainly affected the sector (hdfc, 2023).

Today, when the industry has the potential to absorb the labor force, the labor force is not ready for it. This problem has another dimension as well. Although there is no shortage of the workforce, the poor level of education and absence of practical application of education become so strong that even if the resources get some education, it is

insufficient to sustain the competitive environment. This demand-supply mismatch affects the industry's future, and a sincere effort has already been implemented along with the active participation of private players to educate the youth labor forces so that they can be absorbed in their areas. This will not only solve the unemployment problem but also help reduce the problem of urbanization. Despite being crucial for the growth of GDP and industrialization, most MSMEs lack professionalism. Therefore, they are highly prone to corruption and abuse of power, which has a significant impact on the productivity of their businesses (hdfc, 2023).

Very few MSMEs have established standardized practices (for management in customer-related processes, design and development, management of external providers, control over production and service provision, the release of products and services, and handling of non-conforming outputs) in the way of their operational management (hdfc, 2023).

Therefore, there is a lack of consistency in the performance of its operations, and they have become self-dependent rather than system dependent.

2.2 Management Systems

The ISO-based Management System (MS), a powerful tool for effectively managing business processes, was developed in response to the challenges of increasing market globalization and is widely accepted by over 150 countries worldwide. From the beginning of the ISO standards, there is a question: 'ISO-based management, so what?' ISO-based management system holistically provides insights for establishing systems that effectively manage processes, from determining customer requirements to fulfilling

customer requirements. Over the past 60 years, the management system has shown its importance in increasing the competitiveness of companies and economies. Increasing competitiveness across all parts of the business around the world. Each country has different comparative advantages, for, in the case of China, the government's policies have favored the country's extensive manufacturing growth. Having abundant natural resources or good economic performance is a comparative advantage. In this current trend, knowledge, when seen as a resource, has no defined home base and can be transmitted easily anywhere compared to natural reserves. Being productive – sets the level of prosperity that an economy can earn; competitive economies tend to produce higher income levels for their citizens. The productivity level also determines efficiency; efficiency results in better utilization of resources, and better utilization of the resources leads to improved rates of return obtained by investments in an economy. The return on investment is the primary factor of the economy's growth rates; a more competitive economy will likely grow faster. ISO standards can improve their efficiency and mitigate the risks of improper use. ISO certification should not be considered a goal but a learning process with pitfalls, benefits, and surprises (Boiral, 2011). Retailers sell consumer goods to end-users at lower prices. MSMEs may be very effective only when it comes to being cost-efficient and can create high volumes at meager costs. However, given that their production is on low volumes with fewer margins, reduced productivity can put them at a disadvantage, especially when compared with larger firms.

The Management system standards are based on Annex SL Structure (Itay Abuhav, 2021), Annex SL is a structure defined by the Directives provided by ISO/IEC. Annex SL

structure contains identical core text, common definitions, words, and terms to ensure that Management System Standards (MSS) published by ISO are coherent and compatible. It defines a high-level structure (HLS) for Management System Standards (MSS) published by ISO, it aims to enhance their consistency and alignment (Graham, 2017).

The designed framework makes it easy to implement by the integration of different ISO management system standards within a company, making it easier to establish, implement, and continually improve to comply with the requirements of such ISO management system standards. Annex SL structure is adopted by various standards, including ISO 9001, ISO 14001, ISO 27001, ISO 22000, and ISO 45001, to provide a uniform approach to management systems (Graham, 2017).

The High-Level Structure (HLS), or Annex SL, offers significant benefits for organizations implementing Management System standards (MSS) (Graham, 2017). The advantages include:

- Annex SL harmonizes the structure and language across different MSS, making it easier to integrate multiple requirements within an association and ensure its compliance.
- The framework simplifies integrating management systems, aligning them with the company's strategic goals.
- With a High-level structure (HLS) structure, organizations can save time when implementing and maintaining multiple ISO standards and Improving interpretation effectiveness.

- Annex SL is adaptable, allowing organizations to tailor the MSS to their specific requirements.
- The HLS approach contains a better risk management approach; It ensures
 that both internal and external issues are considered for effective risk
 mitigation operations.
- It emphasizes the part of top management in the success of the MSS, their responsibility and leadership involvement.
- Streamlined Auditing With a common structure, auditing multiple MSS becomes more straightforward, reducing complexity and eventuality for oversight.
- Annex SL fosters a culture of enhancement, encouraging associations to evaluate and improve their management systems regularly.
- By improving processes and systems, associations can deliver better-quality products and services, adding value to Interested parties.

Implementing management system standards based on Annex SL can enhance an organization's credibility on a global scale, as it aligns with internationally recognized practices. Annex SL is a strategic tool that helps associations streamline the operation of Management System standards, leading to bettered performance and competitive advantage (Graham, 2017).

The Annex SL structure of management systems, contains 10 High-level clauses (Graham, 2017), such as

1. Scope

- 2. Normative reference
- 3. Terms and Definitions
- 4. Context of the organization
- 5. Leadership
- 6. Planning
- 7. Support
- 8. Operations
- 9. Performance evaluation
- 10. Continual Improvement

Clause 1.0 defines the scope of the organization where the management system can be applied, such as any organization who are having a set of processes to convert its inputs to outputs by achieving the intended outcome of a management system can apply for the implementation or certification of this management system. For example, an individual alone as identity cannot apply for the certification of the management system rather an individual who runs an organization with a set of processes to full his / her company's customer requirements can apply for the implementation of this standard (Graham, 2017).

Clause 2.0 defines the normative references and specifies the documents that are essential for the effective interpretation, understanding, and implementation of the corresponding management system standard. The primary normative reference for ISO 9001 is ISO 9000: "Quality management systems – Fundamentals and vocabulary," which provides the necessary terms and core concepts for understanding ISO 9001 (Graham, 2017). This clause establishes that to comply with ISO 9001, an organization needs to

understand and apply the information as defined in ISO 9000. It's a foundational element that supports the rest of the quality management system requirements (Graham, 2017).

Clause 3 of the management system standards details the terms and definitions specific to management systems. It is defined for having a clear understanding of the standard's requirements (Graham, 2017). A brief overview of the key terms and definitions:

- Management System: A set of interrelated or interacting elements that establish policies, objectives, and processes to achieve those objectives (Graham, 2017).
- Management system Policy: Intention and direction of an organization related to Management system performance, as formally expressed by its top management (Graham, 2017).

These terms are arranged in a sequential order relevant to a Management System and are essential for organizations seeking to apply the corresponding Management System effectively (Graham, 2017). Such as, terms related to

- person or people
- organization
- activity
- process
- system.
- requirement
- result

- data, information, and document
- customer
- characteristic
- determination
- action
- audit

Terms and Definitions should be understood, for effective implementation of the management system; certain key terms (Cochran, 2015) that should be considered for improvement the excellence of management include, the following, but not limited to:

- top management: person or group of people who directs and controls an organization at the highest level
- engagement: involvement of individuals in and contribution to activities to achieve shared objectives
- organization: a person or group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives
- context of the organization: the combination of internal and external issues
 that can influence an organization's approach to developing and achieving
 its objectives
- interested party: stakeholder -person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity
- continual improvement: recurring activity to enhance performance

- process: a set of interrelated or interacting activities that use inputs to deliver an intended result
- procedure: specified way to carry out an activity or a process
- outsource: arrange where an external organization performs part of an organization's function or process
- system: a set of interrelated or interacting elements
- management system: a set of interrelated or interacting elements of an organization to establish policies, objectives, and processes to achieve those objectives
- requirement: need or expectation that is stated, generally implied, or obligatory
- performance: measurable result
- risk: effect of uncertainty
- documented information: information required to be controlled and maintained by an organization and the medium on which it is contained
- competence: ability to apply knowledge and skills to achieve intended results
- corrective action: action to eliminate the cause of a nonconformity and to prevent recurrence
- correction: action to eliminate a detected nonconformity

 audit: systematic, independent, and documented process for obtaining objective evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Organization implementing management system must interpret each of the clauses for the compliance to the management systems, as the term "shall" appears as a text from the clause 4-10 hence these 7 clauses are also termed as "compliance clauses".

Compliance clauses are

- Clause 4: Context of the organization
- Clause 5: Leadership
- Clause 6: Planning
- Clause 7: Support
- Clause 8: Operations
- Clause 9: Performance evaluation
- Clause 10: Continual Improvement

Clause 4 consists for 4 sub clauses (Graham, 2017) in the management system standards

- Clause 4.1 Context of the organization
- Clause 4.2 Interested party needs and expectations
- Clause 4.3 Scope of certification
- Clause 4.4 Management system process

Clause 4.1 context of the organization, requires the organizations to identify, evaluate in the internal and external issues that influence the intended outcome of the

organization. Internal issues can refer to factors such as values, culture, knowledge, and performance of the organization. External factors can refer to such as legal, technological, competitive, market, cultural, social, and economic environments (Andres-Jimenez et al., 2020). These factors may influence the intended outcomes of the organization in different ways could be positive and negative. SWOT analysis can be an effective tool (Pahl and Richter, 2018) for organizations. The Strength can be factors like: Internal positive factors to the intended outcomes for the organization objectives for implementing the management system. The weakness can be factors like: Internal negative factors to the intended outcomes for the organization objectives for implementing the management system. The Opportunities can be factors like: External positive factors to the intended outcomes for the organization objectives for implementing the management system. The Threat can be factors like: External negative factors to the intended outcomes for the organization objectives for implementing the management system (Graham, 2017).

Let us consider the intended outcome of a quality management system for a MSME organization who is manufacturing of mechanical components used in automotive applications are as follows:

- 1. Customer satisfaction
- 2. Process efficiency
- 3. On time delivery
- 4. Reduced Rejections
- 5. Reduced Reworks
- 6. Improve employee satisfaction

7. Reduce cost of procurement

Then, the factors which influence the above intended outcomes are defined as context of the organization, which can include but not limited to:

• External Factors

- Cultural attitude of personnel towards the response to certain services rendered by the organization
- o Strikes and Other factors that can delay the project timelines
- Unknown terrain and resource unavailability for personnel in site during work execution
- Non Non-availability of Employees & other Employee issues
- Unavailability of Materials

Internal factors

- Cross-cultural personnel need to have good communication skills, a broad-minded perspective on tasks, and the patience to address certain issues faced during the activities they execute.
- Thorough knowledge of the task being carried out without misconceptions.
- o Non Non-availability of Labor & other labour issues
- Constant Travel of Employees
- Loss of Materials

o Rejections

Breakdowns

The organisation implementing the Quality management system has to establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 4.2 Interested parties and their needs and expectations (Graham, 2017), requires the organization identify and evaluate the needs and expectations of the interested parties such as requirements of the interested parties that are expected to be fulfilled by the organization. These requirements must be evaluated to verify which of them become a compliance obligation such as legal and other contractual requirements that an organization is bound to fulfill to the interested party. The interested party requirements and fulfilling their needs and expectations also have a significant role in achieving the intended outcomes of a management system.

The interested parties of an organization can be both internal and external to the organization. Internal interested parties are within the organization direct control to its policies and procedures and external interested parties are outside the organization. Internal interested parties can include Employees, Management, Different process owners, Shareholder, Board of directors. External interested parties can include Customers, Neighbors, Community, Industry Fraternity, Suppliers, Vendors, Certification Body.

Let us consider the intended outcome of a quality management system for a MSME organization who is manufacturing of mechanical components used in automotive applications are as follows:

- 1. Customer satisfaction
- 2. Process efficiency
- 3. On time delivery
- 4. Reduced Rejections
- 5. Reduced Reworks
- 6. Improve employee satisfaction
- 7. Reduce cost of procurement

Then the Interested party needs and expectations (Paul, Cadle and Yeates, 2020) which influence the above intended outcomes are defined as interested party requirements, which can include but not limited to

• Stakeholders:

- O Constant improvement in the performance of the organisation.
- o Less Turnover of Employee's
- o Increase in the trend of the projects awarded.
- o Widen the width of services rendered by the organisation.
- Less impact to environment and promote concept of reuse to minimise resource consumptions.
- No accidents/incidents and health hazards at workplace provided to employees

Customers

Details of requirements as indicated in the Tender / Contract / Work
 orders of the Customer.

- Environmental management as per the requirements specified in Customer requirements documents.
- No accidents/incidents and health hazards at workplace provided to employees
- Employee's and workers
 - Good work environment and attitude
 - Continuous upgrade of knowledge
 - Breaking monotony in work
 - No ambiguity in executing work
 - Open door policies related to work management
 - Less Polluted work environment
 - No accidents/incidents and health hazards at workplace provided to employees
- Local Community / Neighbours / NGO's / Environmental Activists -(Compliance obligations)
 - o Prevention of Pollution
 - o Minimise impact to the flora & fauna in and around project sites.
 - No accidents/incidents and health hazards at workplace provided to employees
- Statutory and Regulatory Bodies (Compliance obligations)
 - Compliance to the conformity norms as specified by the regulatory bodies

- No accidents/incidents and health hazards at workplace provided to employees
- Timely reporting of any accidents / incidents that are statutory reportable

Organizations need to identify which of

- a) the interested parties, in addition to workers, that are relevant to the management system.
- b) the requirements (relevant needs and expectations) of these interested parties and workers relevant to the management system.
- c) which of these needs and expectations are, or could become, legal requirements and other requirements Compliance obligations.

The organisation implementing the Quality management system has to establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 4.3 Scope of certification requires the organization to define the scope of the management system. MSME industries must determine the boundaries and applicability of the management system to establish its scope.

When determining this scope, MSME should consider the following:

- a) the external and internal issues subjected to the organization.
- b) the requirements of relevant interested parties subjected to the organization.
- c) the compliance obligations referred to interested party requirements.
- d) its organizational units, functions, and physical boundaries.

- e) its activities, products, and services, of the organization.
- f) its authority and ability to exercise control and influence
- g) include the activities, products and services within the organization's control or influence that can impact the organization's management system performance

MSME shall apply all the requirements of Management system standards as they are applicable within the determined scope of its management system.

The scope of the organization's management system shall be made available and maintained as documented information that is prefaced in the manual of the organization implementing the management system. The scope states the types of products and services covered and provide justification for any requirement of management system standard that MSME determines is not applicable to the scope of its management system - and justify the exclusion to international management system Standard requirements.

Conformity to International management system Standard can be claimed as the requirements determined as not being applicable do not affect the organization's ability or responsibility to ensure the conformity of its products and services and the enhancement of customer satisfaction or fulfillment of compliance obligations.

Clause 4.4 Management system processes requires the organization to have established, implemented, maintains, and continually improve a management system, including the processes needed and their interactions, in accordance with the requirements of this international management system Standard to achieve the intended outcomes, including enhancing its management system performance.

MSME determines the processes needed for the management system and their application throughout the organization, and ensure it has:

- a) determined the inputs required and the outputs expected from these processes.
- b) determined the sequence and interaction of these processes.
- c) determined and applied the criteria and methods (including monitoring, measurements, and related performance indicators) needed to ensure the effective operation and control of these processes.
- d) determined the resources needed for these processes and ensured their availability.
- e) assigned the responsibilities and authorities for these processes.
- f) addresses the risks and opportunities as determined in accordance with the requirements of ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 International Standard.
- g) evaluates these processes and implement any changes needed to ensure that these processes achieve their intended results.
- h) improves the processes and the quality, environmental, occupational health, and safety management system.

To the extent necessary, MSME has:

- a) maintained documented information to support the operation of its processes.
- b) retains documented information to have confidence that the processes are being carried out as planned.

Organizations establish Turtle diagrams (Kymal, 2007), to establish and demonstrate the requirements of the processes that are established to demonstrate the requirements of how the management systems processes are established as per the standard requirements.

Clause 5 consists for 3 sub clauses, (Graham, 2017) in the management system standards

- Clause 5.1 Leadership and commitment
- Clause 5.2 Policy
- Clause 5.3 Responsibilities and authorities

Clause 5.1 Leadership and commitment, requires Top management of MSME to demonstrate the leadership and commitment with respect to the management system by:

- a) taking accountability for the effectiveness of the management system, taking overall responsibility and accountability for the prevention of work-related injury and ill health, as well as the provision of safe and healthy workplaces and activities.
- b) ensuring that the management system policy and management system objectives are established for the corresponding management system implemented in the organization and are compatible with the context and strategic direction of the organization.
- c) ensuring the integration of the management system requirements into the organization's business processes.
- d) promoting the use of the process approach and risk-based thinking.
- e) ensuring that the resources needed for the management system are available.

- f) communicating the importance of effective management and of conforming to the management system requirements.
- g) ensuring that the management system achieves its intended results.
- h) engaging, directing, and supporting persons to contribute to the effectiveness of the management system.
- i) promoting improvement.
- j) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.
- k) developing, leading, and promoting a culture in the organization that supports the intended outcomes of the management system.
- protecting workers from reprisals when reporting incidents, hazards, risks, and opportunities.
- m) ensuring the organization establishes and implements a process for consultation and participation of workers
- n) supporting the establishment and functioning of management system committees

The management review process shall be established by the MSME organization to fulfill the requirements of the commitment that needs to be demonstrated by the leadership of the organization.

Clause 5.2 policy requires the organization to establish a policy to suit the management system requirements. MSME should have established, implemented, and maintains a managements system policy that:

- a) is appropriate to the purpose and context of organization and supports its strategic direction.
 - b) provides a framework for setting management system objectives.
- c) is committed to satisfaction of legal and other requirements including compliance obligations.
- d) is committed to continual improvement of the applicable management system and enhance management system performance.
- e) is committed to the protection of the ecosystem such as environment, including prevention of pollution and other specific commitment(s) relevant to the context of the organization.
 - f) is committed to fulfil its compliance obligations
 - g) is committed to provide safe and healthy working conditions.
 - h) is committed to eliminating hazards and reducing risks.
 - i) is committed to continual improvement of the management system.
- j) is committed to consultation and participation of workers, and, where they exist, workers' representatives.

The Policy must be defined and approved by the top management, and it is their responsibility to ensure that this policy is conveyed and adhered by all employees to meet and exceed customer requirements through understanding and adherence to all standard operating procedures and work instructions.

The Objectives of MSME is derived from the policy and these are established and reviewed to meet the purpose of the organization.

The Policy and Objectives are disseminated through contact forums, visual displays, and explanation to all the people in MSME with metrics to communicate actions and outcomes towards the objectives.

The policy is reviewed on a regular basis through the MRM meetings

The management system policy is ensured to be

- a) Relevant, appropriate, available, and maintained as documented information.
- b) trained, understood, and adhered to within the organization.
- c) available to relevant interested parties, as appropriate such as display in website and prominent locations within the organization

Clause 5.3 Organization role, responsibility and authority requires the organization that the job description for relevant roles are assigned, trained, circulated, and understood within the organization. Individuals are identified whose additional responsibilities and authorities include, but not limited to:

- a) ensuring that the management system meets the requirements of the corresponding International Standard.
 - b) ensuring that the established processes are delivering their intended outcomes.
- c) reporting on the results and performance of the outcomes of the management system and identifying the opportunities for improvement, to Leadership of the organization.
- d) focusing that the principle of customer focus is established throughout the organization.

e) focusing that the integrity of the management system is maintained when changes are carried out to the management system are planned and implemented.

Job descriptions are established and circulated to ensure the same is understood by the employees for the different roles that are assigned for fulfilling the intended outcomes of the management system.

Clause 6 consists for 3 sub clauses, (Graham, 2017) in the management system standards

- Clause 6.1 Actions taken to address risk and opportunities
- Clause 6.2 Objectives
- Clause 6.3 Planning of changes

Clause 6.1 Actions taken to address the risk and opportunities requires the organization to identify and control the risk and opportunities that arise from the internal and external issues identified in the organization as per the context analysis and actions are taken to address the risk and opportunities against the interested parties needs and expectations that are mapped to the intended outcomes of the management system. These actions must ensure that the organization can prevent adverse outcomes, increase the efficiency and effectiveness of its management system. Actions taken against such risk and opportunities should be monitored at planned intervals based on the complexity of the mitigation plans. Few of the Keys risks an organization can address includes but not limited to:

- Financial risks
- Technological risks

- Operational risks
- Brand Risks
- Talent Risks
- Health and Safety Risks
- Information security risks
- Environmental risks
- Compliance risks

Few of the opportunities an organization can address includes, but are not limited

to:

- Increase competence and awareness
- Change of infrastructure
- Change in technology
- Change in its policies and procedures
- Change in process adopted for fulfilling the management system needs

A risk assessment must be undertaken to evaluate which of the following factors evaluated have a priority over other identified factors, such assessment can consider the product the likelihood of the occurrence of the factor and the severity of the outcome that arises due to the factor under study to the organization objectives or the intended outcomes of the management system. As a result, the organization prioritize to consider risks based on the risk priority number and risk result arising from such prioritization. The organization can classify the risk as High / Medium / Low based on the risk score derived from risk

analysis. Risks classified as High has significance over the other risk categories and actions over such risks can be prioritized by the MSME organization.

Actions taken against the risks and opportunities are appropriate to the potential consequence on the conformity of products and services.

The organization, in its planning process, determines and assesses the risks and opportunities as appropriate to the expected performance of the integrated management system associated with changes in the organization, its processes or the integrated management system. In the case of expected changes, temporary or permanent, these risk studies shall be performed before the change is executed.

Documents such as records and data sheets on:

- a) risks and opportunities.
- b) the process and actions needed to determine and address its risks and opportunities to ensure processes are executed as per planned arrangement

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 6.2 of the standard requires the organization to identify and establish the objectives. These objectives shall be consistent with the management system policy defined by the organization. The established objectives must be covered at all levels, functions, and processes of the organization.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system's intended outcomes. The management system objectives are

- a) consistent with the management system policy.
- b) measurable for its performance of corresponding management system.
- c) consider:
- a. corresponding management system applicable requirements.
- b. the results of the assessment of corresponding management system risks and opportunities
 - d) relevant to conformity of services and to enhancement of customer satisfaction.
 - e) monitored.
 - f) communicated.
 - g) updated as appropriate.

Objective data are monitored and governed how the results will be assessed, including measurable indicators for monitoring progress toward achievement of its measurable management system objectives.

The organization maintains and retains the data on the management system objectives and plans to achieve them. The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 6.3 of the standard requires the organization to identify the changes to be executed in a planned manner. EEPL considers:

- a) the need for the changes and their potential consequences.
- b) the integrity of the management system.
- c) the availability of infrastructure and resources.
- d) the availability, allocation or reallocation of role, responsibilities, and authorities.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 7 consists for 5 sub clauses, (Graham, 2017) in the management system standards

- Clause 7.1 Resources
- Clause 7.2 Competence
- Clause 7.3 Awareness
- Clause 7.4 Communication
- Clause 7.5 Documented information

Clause 7.1 of the standard requires the organization (Gupta, 2000), MSME has determined and provides the resources for the management system that needed for the establishment, implementation, maintenance, and continual improvement of the processes that are established for management system.

MSME considers:

a) the constraints and capabilities of, and on, existing internal resources.

b) what needs to be obtained from suppliers, vendors or other third-party agencies including outsourced processes.

All the above information should also be discussed in all management review meetings, and the outputs are included in the process requirements.

MSME shall determine the persons necessary for the effective implementation of its management system and provide competent persons for the operation and control of its processes as required by the respective process. MSME shall maintain the provided infrastructure as needed for the process to operate to achieve compliance to its delivered products and services. MSME for ensuring proper resource management maintains the provided environment considering social, physiological, physical, and ergonomic conditions that is as needed for the process to operate to achieve intended output that is compliance to its delivered products and services.

MSME shall ensure retains records as evidence of calibration of the monitoring and measurement equipment, device, instruments, and any other resources used for monitoring and measurement of its process, product, and service where measurement traceability is a requirement (Ramesh, 2021).

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 7.2 of the standard requires knowledge as needed for the process to operate to achieve conformity of products and services.

This knowledge is maintained and be made available to the extent necessary by ensuring the necessary competence of individuals working in the organization control that effects the management system performance, where applicable, MSME organization take actions to ensure the necessary skills, competence is acquired if not available and evaluates the actions effectiveness (Ramesh, 2021).

Training systems and procedures shall be established by the MSME to achieve conformity to the defined requirement.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 7.3 of the standard requires individuals doing work under the organization's control (Ramesh, 2021) are aware of

- policy
- objectives
- Dos and Don'ts of the management system
- Emergency preparedness and response, and
- Compliance obligations that needs to be fulfilled.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 7.4 of the standard requires communication systems to be established including internal and external communications, not limiting to the topics such as

- ISO Policies
- Policies of Organization
- Process Requirements
- Product Updates
- Performance of Systems
- Performance of Personnel
- Customer Complaints
- Improvements
- Objectives
- Changes to System
- Trainings
- Product Information
- Complaint Receipt
- Complaint Resolution
- Product Issues
- External Provider Issues
- Police
- Cyber Crime
- Fire Station
- Hospital
- Legal Affairs

- Sever Issue
- Network / Internet Issue
- Laptop / Computer Issues
- Purchased material issues
- Hired vehicles / equipment
- Externally provided Services issues

The organization responds to relevant communications on its management system and retains evidence of its communications, as documented information (Ramesh, 2021).

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 7.5 of the standard requires documented information to be controlled with documenting all processes that are required by the management system as documented information and each documented information is reviewed and approved prior to use and its distribution is controlled and monitored by identifying it with document versioning system with proper identification to ensure the documented information belongs to the organization.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 8.0 Operations has difference in the number of sub clauses in each management system however to summarize the requirements of the popular management systems (Atencio, 2021) such as

- Quality management system ISO 9001
- Environmental management system ISO 14001
- Occupational Health and Safety management system ISO 45001

Clause 8.0 of the management system standards requires the organization to plan, provide tools, and control the processes demanded to meet the conditions for the provision of products and services and to apply the conduct determined in the planning of processes (Natarajan, 2017), by

- a) determining the conditions for the products and services.
- b) the acceptance of products and services against the established criteria for the processes,
- c) determining the process needed to achieve conformity to the product and service conditions.
- d) enforcing control of the processes in agreement with the accepted criteria of the corresponding management systems.
- e) determining, maintaining, and retaining documented information to the extent necessary to assure that the system and processes are practiced, and records are implemented as planned and to demonstrate compliance with the resulting products and services to their conditions (Ramesh, 2021).

The results of this planning must be suitable for the MSME organization's operations. The MSME organizations control planned changes and review the consequences of unintended changes, taking action to alleviate any adverse outcomes as necessary. The MSME organizations ensure that outsourced processes are controlled. The implicit impact of the outsourced process on the MSME's capability to produce process outcomes that conform to conditions. The organization must monitor the degree to which the control for the process is executed (Atencio, 2021). The capability of achieving the necessary control through the operation of outsourced process control MSME shall ensure it has established tools and maintains the processes needed to prepare for and respond to implicit unforeseen situations linked to its performance shortfalls.

Communication with end users/customers/clients includes

- a) furnishing information relating to products and services.
- b) handling inquiries, contracts, or orders, including changes.
- c) carrying client feedback on products and services, including client complaints.
- d) handling or controlling client property.
- e) establishing specific conditions for contingency, when applicable.

MSME reviews order conditions before confirming the supply of products and services to a client (Atencio, 2021), including

- a) conditions specified by the client, including the conditions for delivery and postdelivery conditioning.
- b) conditions not stated by the client but necessary for the specified or intended use when known.

- c) conditions specified by the MSME organizations.
- d) statutory and nonsupervisory conditions applicable to the products and services.
- e) Contract or order conditions differing from those preliminarily expressed.

MSME retains information, as applicable:

- a) The results of the review.
- b) on any new conditions for the products and services. A cross-functional team reviews all specifications and risks and identifies any conflicts before acceptance (Atencio, 2021). Applicable proof information is amended, and applicable persons are apprehended of the changed conditions when the conditions for products and services are changed.

In determining the phases and mechanisms to monitor for design and development (Atencio, 2021), MSME takes into consideration the following:

- a) the design and development's nature, duration, and complexity.
- b) applicable design and development reviews, including the required process stages.
- c) design and development verification and confirmation to fulfill intended results; and
 - d) the liabilities and authorities involved in the design and development process.
- e) The resource includes internal and external needs for designing and developing products and services.
- f) the need to control interdependencies between persons involved in the design and development process.

- g) the need to involve end users/customers/clients in the design and development process.
 - h) the conditions for the provision of products and services.
- i) the controls anticipated for the design and development process by end users/customers/clients and other applicable interested parties.
- j) The provided information is needed to demonstrate that design and development conditions have been met.

MSME ensures that externally handled processes, products, and services conform to conditions (Atencio, 2021). MSME determines the controls to be applied to externally handled processes, products, and services when

- a) services and products from external providers are intended for use in the MSME organizations' own products and services.
- b) services and products handed directly to the client(s) by external providers on behalf of the MSME organizations.
- c) a process, or part of a process, is handled by an external provider due to a decision by the MSME organizations.

MSME shall ensure it has determined and applied criteria for evaluating, selecting, monitoring performance, and evaluating external providers, grounded on their capability to give processes, products, and services in agreement with conditions. MSME retains proven information on these conditions and any necessary conduct from the evaluations (Ramesh, 2021).

The quality of the services and products received by MSME affects the quality of the final output - services or products delivered by MSME. Consequently, systems and procedures must be established to ensure that the bought product conforms to specified quality conditions. Evaluation of External Providers (Atencio, 2021). The purchase process has various sections, one for direct procurement of all raw materials and consumables from suppliers and the other for working on materials purchase per specifications anticipated from outsourced processes also known as sub-contractors.

- a) All suppliers for raw materials and consumables are estimated, named, and approved on techno-commercial capability, with former track records available with them to meet our quality conditions as outlined in the purchase procedure
- b) The standing of subcontractors is done as detailed in the purchase procedure, and the subcontractors are bound by a contractual agreement to meet the delivery and quality conditions of the work.
- c) Control is exercised on subcontractors by continuously covering their performance. The evaluation, standing, and revaluation of the subcontractor's performance are to be done periodically as defined in the purchase procedure.
- d) The sourcing department lists the approved suppliers and subcontractors maintaining the records. All orders are placed only with approved suppliers and subcontractors, and the design and quality heads of the corresponding organization authorize any deviation from this.
 - e) Records of evaluation of subcontractor performance are also maintained.

Operational Controls on processes must be established through quality procedures, Work instructions, and quality plans. These controls define methods to work, and records needed to ensure process controls have been duly applied and recorded. An applicable and well-maintained structure is implemented to ensure product and service compliance in the organization. Checks are done in all product/service delivery stages per the organization's in-process quality plan (Atencio, 2021).

Records ensure that traceability can be demonstrated. Identification markers are used to identify materials and services as necessary to ensure the compliance of products and services as per requirements of the management system or quality plan or as per customer requirements; the status of outputs concerning monitoring and dimension conditions for tangible products throughout the product is done through the Route Cards in manufacturing industries /traceability identifiers in the service industry (Ramesh, 2021). The MSME organizations exercise careful verification with property belonging to end users/customers/clients or external providers while it's under the MSME organizations' control or being used by the MSME organizations. The MSME organizations identify, verify, protect, and safeguard end users/customers/clients or external providers' property handed for use or objectification into the products and services (Frede Jensen, 2017). If a customer or external provider is lost or damaged, the MSME organizations report this to the client or external provider and retain information on what has been communicated. The quality control procedure and separate work instructions define the monitoring and measurement conditions for all services and products for recording data as a record of actions or remedial plans for problems encountered. Acceptance criteria are established in

the Quality Plan, and if the product/ functions fail to meet these destined criteria, applicable actions will be taken (Ramesh, 2021). Any deviations from the standard conditions will be recorded and agreed with the client. Products and Outsourced/ Subcontracting Services, which are set up to be non-conforming in relation to the descriptions indicated in the Quality Plan, it'll be identified and recorded as defined in Quality Control procedures. Records of nonconformances will be recorded in the NC log and controlled for future operations prevention plans in the delivery performance review meeting records (Frede Jensen, 2017).

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 9 consists for 3 sub clauses, (Graham, 2017) in the management system standards

- Clause 9.1 Monitoring, Measurement, Analysis and Evaluation
- Clause 9.2 Internal Audit
- Clause 9.3 Management Review Meeting

Clause 9.1 of the management system requires organizations to identify and establish performance indicators for evaluation of the process and product conformity in relation to its planned arrangements (Carr, Mak and Needham, 1997). For the company to improve its products and processes, it plans that the activities are monitored in all processes. Organization can achieve continual improvement through its planned activities.

The company will apply suitable methods for monitoring and, where applicable, measurement of the quality system processes. Methods must be identified and established to demonstrate the performance of the processes against the planned results (Frede Jensen, 2017). When results are not as per plan, actions are taken to ensure conformity of the product and service to customers such actions include correction and corrective action. Process measures (Ramesh, 2021) may include:

- Capability in terms of knowledge, Training, skills, competence,
 manpower and availability of equipment
- Turnaround time lead time taken responses to requests related to the process tasks, queries, quotation, and changes to customer requirements
- The efficiency and effectiveness of the employees trackers, registers, and results from monitoring of data
- Utilization of technologies
- On time completion of projects
- Payment Receivables
- Customer, Environment impact, occupational health complaints, health of workers (through surveillance) and work environment.
- COPQ, work-related incidents, environmental impacts, injuries and ill
 health, and complaints, including trends.
- the operational controls effectiveness and performance of the emergency mock drill exercises, the necessity to change or establish new controls.
- competence.

Examples of what could be monitored and measured to evaluate the compliance to the adherence to legal requirements can include (Ramesh, 2021), but not limited to:

- identified legal requirements verify whether the organization's documented information of them is kept up to date
- collective agreements (when legally binding).
- the status of identified gaps in compliance.

Examples of what could be monitored and measured to evaluate the adherence to other requirements include (Ramesh, 2021), but not limited to:

- collective agreements (when not legally binding).
- standards and codes.
- Company policies, and regulations.
- insurance requirements.

Operational Criteria for organization to evaluate and to compare its performance against. Examples are benchmarks against:

- other organizations' performance (sales data).
- standards and codes.
- the organization's own codes and objectives.

Management system statistics (Ramesh, 2021). To measure criteria based on comparisons certain indicators that are typically used, for example:

incidents: look at frequency, type, severity, or number of incidents;
 determine rate

completion of actions taken including correction and corrective action, then
 the indicator could be the percentage of the actions completed on time.

Monitoring involves determining the status to identify change from the performance level required or expected. Monitoring can be applied to the management system, to processes or to controls. Examples include the use of interviews; reviews of documented information and observations of work being performed.

Measurement involves the review of numbers to objects or events (Ramesh, 2021). The Quantified data is the basis for such measurement review and is generally associated with the evaluation of performance related to safety programs and surveillance of health. Analysis is the process of reviewing the data to reveal correlation, and trends. This can mean the use of statistical analysis, including information from industry data or similar organizations, to derive conclusions from the data. Evaluation of Performance is an exercise undertaken to determine the suitable adequacy and effectiveness of the topic to achieve the performance indicators and objectives of the management system.

MSME shall recognize the importance of collecting data from many sources on its performance and ensure it has implemented procedures for the collection of data on its performance, through surveys/complaints, feedback and reports, results from audits, monitoring of supplier and operational processes. This data is collated and reported to the management review where appropriate follow up actions are considered (Ramesh, 2021). The results of analysis are used to evaluate:

- a) products and services compliances.
- b) the extent of customer satisfaction.

- c) the performance and effectiveness of the management system.
- d) if planning, including risk analysis has been implemented effectively.
- e) the results of effectiveness related to addressing risks and opportunities based on actions taken.
- f) the performance of outsourcing companies, suppliers, vendors.
- g) management system improvements

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 9.2 of the management system requires organizations to perform internal audits. The Coordinator for the Management system circulates the entire Management system documents as PDF Version on the Server and accessibility to the documents are provided by Coordinator for the Management system (Atencio, 2021).

Internal audit will be conducted as per Annual Audit plan prepared risk based on results of previous audits, or once every 6 months to comprehensively cover the Annual Audit Plan the following is considered.

- Status and importance of the process to be audited, based on risk assessments
- Areas to be audited
- Previous Audit results
- Performance of the Organization with respect to the implementation of Management system.

- Internal Audit schedule will be released based on the following: -
- Importance of the area
- Repetition of non-conformance's/ Security incidents
- Occurrence for a greater number of nonconformities
- Annual audit plan

Trained auditors will be assigned independent of the work being performed in the audit area. In case of urgent need or non-availability of Trained Internal Auditors, External support like consultants will be used for conducting the Internal Audit. The identified Personnel will undergo a detailed Training program for conducting Internal Audit from External Training Agency and the trained personnel will conduct one cycle of Internal Audit to get qualified as effective Internal Auditor (Atencio, 2021). Auditors will not audit their own work. Audit observations are recorded in the Audit Observation sheet and handed over to respective Auditee/Coordinator for the Management system.

The findings are classified as Compliance (C), Noncompliance (NC) and Opportunity for Improvement (OI).

Audit Non-conformances will be recorded in the Corrective action report and brought to the attention of the Auditee. Auditee decides the Correction, Corrective Action to be taken as planned such that the non-conformances does not occur or repeat again.

Follow up audit to verify implementation & effectiveness of Corrective actions will be organized on or after the target date by the Coordinator for the Management system.

The closed audit reports shall be given to the Coordinator for the Management system. Documented information of the Audits and their results will be presented to the

Management Review and maintained by Coordinator for the Management system (Atencio, 2021).

Conducting Department Audit, The Coordinator for the Management system circulates the entire Management system documents as PDF Version on the Server and accessibility to the documents are provided by Coordinator for the Management system.

Department audit will be conducted once every 6months. Dept. HOD will conduct the audit. In case of urgent need or non-availability of Dept. HOD, External support like consultants will be used for conducting the Department Audit. Audit observations are recorded in the Audit Observation sheet and handed over to respective Auditee/Coordinator for the Management system.

The findings are classified as Compliance (C), Noncompliance (NC) and Opportunity for Improvement (OI).

Audit Non-conformances will be recorded in the Corrective action report and brought to the attention of the Auditee. Auditee decides the Correction, Corrective Action to be taken as planned such that the non-conformances does not occur or repeat again.

Follow up audit to verify implementation & effectiveness of Corrective actions will be organized on or after the target date by the Coordinator for the Management system. The closed audit reports shall be given to the Coordinator for the Management system. Documented information of the Audits and their results will be presented to the Management Review and maintained by Coordinator for the Management system.

Conducting Technical Audit. The Coordinator for the Management system circulates the entire Management system documents as PDF Version on the Server and

accessibility to the documents are provided by Coordinator for the Management system.

Technical audit will be conducted once every Six months. Coordinator for the Management system with IT Lead will conduct the audit.

In case of urgent need or non-availability of Coordinator for the Management system with Technical Lead, External support like consultants will be used for conducting the Department Audit. Audit observations are recorded in the Audit Observation sheet and handed over to respective Auditee/Coordinator for the Management system (Ramesh, 2021).

The findings are classified as Compliance (C), Noncompliance (NC) and Opportunity for Improvement (OI).

Audit Non-conformances will be recorded in the Corrective action report and brought to the attention of the Auditee. Auditee decides the Correction, Corrective Action to be taken as planned such that the non-conformances does not occur or repeat again. Follow up audit to verify implementation & effectiveness of Corrective actions will be organized on or after the target date by the Coordinator for the Management system.

The closed audit reports shall be given to the Coordinator for the Management system.

Documented information of the Audits and their results will be presented to the Management Review and maintained by Coordinator for the Management system.

Clause 9.3 of the management system requires the management review to carried out at planned frequency such as once in six months (Atencio, 2021), taking into the agenda such as:

- a) Adequacy of the Policy
- b) Adequacy of the Objectives
- c) Views of the Interested parties
- d) Customer Focus SWOT analysis review
- e) Resources capability
- f) The status of actions from previous management reviews.
- g) Changes in external and internal issues that are relevant to the management system.
- h) Analysis and evaluation of data, information on the performance and effectiveness of the management system, including trends in:
 - a. customer satisfaction and feedback from relevant interested parties.
 - b. the extent to which objectives have been met.
 - c. process performance and conformity of products and services.
 - d. nonconformities and corrective actions.
 - e. monitoring and measurement results.
 - f. audit results.
 - g. the performance of external providers.
 - h. Number of IT tickets/complaints raised Vs closed (x axis –months)
 - i. Number of incidents reported Vs closed
 - j. Number of ISMS event reported Vs closed
 - k. Number of Virus/malware/spywares

- Updates of patches received Vs Completed (classification vice: Microsoft, firmware, server, network gears, etc.)
- m. Capacity Plan
- n. Changes carried out
- o. Disciplinary Process Data
- p. Vulnerability Performance data
- q. BCP performance data
- r. SLA performance of Suppliers (supplier evaluation)
- s. Number of registered users
- i) The adequacy of resources.
- j) The effectiveness of actions taken to address risks and opportunities in planning of the systems and processes.
- k) Opportunities for improvement.

The output of the management review related to Management system includes: conclusions on the continuing suitability, adequacy, and effectiveness of the management system.

- decisions related to continual improvement opportunities.
- decisions related to any need for changes to the environmental management system, including resources.
- actions, if needed, when objectives have not been achieved.
- opportunities to improve integration of the environmental management system with other business processes, if needed.

• any implications for the strategic direction of the organization.

Top management communicates the relevant outputs of management reviews to workers, and, where they exist, workers' representative. The organization retains documented information as evidence of the results of management reviews.

The organization implementing the management system must establish the processes that can address the above identified factors that would influence the management system intended outcomes.

Clause 10 consists for 3 sub clauses, (Graham, 2017) in the management system standards

- Clause 10.1 General
- Clause 10.2 non-conformity and corrective action
- Clause 10.3 Continual improvement

Clause 10 of the management system requires, when nonconformity occurs, the organization:

- a) reacts to the nonconformity, and as applicable:
 - i. takes action to control and correct it; and
 - ii. deals with the consequences.
- b) evaluates the need for action to eliminate the causes of nonconformity, in order that it does not recur or occur elsewhere, by:
 - i. reviewing the nonconformity.
 - ii. determining the causes of the nonconformity; and

- iii. determining if similar nonconformities exist or could potentially occur.
- c) implement any action needed.
- d) review the effectiveness of any corrective action taken; and
- e) make changes to the management system, if necessary.

Corrective actions taken are appropriate to the effects of the nonconformities encountered.

MSME organizations shall retains documented information as evidence of:

- f) the nature of the nonconformities and any subsequent actions taken, and
- g) the results of any corrective action.
- 1. Procedure for handling nonconformity and taking corrective action
- 1. Any Security Breach, or event that can Impact on compromising the Confidentiality, Availability and Integrity of the Information that's impacts management system from the defined system, is considered as a non-conformity.
- 2. Any Audit nonconformity or customer complaint that impacts the management system is considered as a non-conformity.
- 3. Non-Conformity can be reported by Internal Employee's, Interested Party, External Personnel visiting organization and Customer.
- 4. For the non-conformance including complaints reported by the customer, necessary actions will be initiated and informed accordingly to the Customer.
- 5. The management system coordinator and respective Departmental Heads analyses the nature of the error/problem and decides the disposition action (correction).

6. A root cause analysis shall be done based on the Incident occurred, that lead to non-conformity of the management system, and Respective Departments shall maintain documented information of such corrective actions (Atencio, 2021).

Any Cause analysis tool shall be used for the cause analysis:

- Brainstorming
- Why Why analysis
- Fault Tree Analysis
- Fishbone / Cause and Effect diagram
- Or any appropriate analysis tool

Corrective actions are taken to prevent reoccurrence of problems related to management system requirements.

The concerned personnel responsible for taking corrective action will analyze the problem to identify the root cause or potential causes. The findings of the investigation will be recorded in the corrective action form. The solution to the root cause is identified and recorded.

The initiator of the CA will track the corrective action implementation, recording results of action taken through verification process, and review the effectiveness of corrective action taken.

The function head / management system coordinator / internal auditors verify the implemented corrective action for effectiveness of the status of the corrective action and are reviewed in the management review meeting.

ISO 9001:2015 is structured into ten clauses, with clauses 4 to 10 outlining the requirements for a Quality Management System (QMS) (Atencio, 2021). Here's a summary of each:

Clause 4—Context of the Organization: This clause requires the organization to determine external and internal issues that are relevant to the organization's purpose and strategic direction and the needs and expectations of interested parties. It also includes defining the scope of the Management system Standards and its processes.

Clause 5—Leadership: Top management must demonstrate leadership and commitment to the Management system Standards, by establishing a Management system Standards policy, objectives, providing resources, and ensure that roles, responsibilities, and authorities are assigned and communicated within the organization.

Clause 6—Planning: Organizations must address risks and opportunities, set Management system Standards objectives, and plan how to integrate them into the Management system Standards processes. This clause also covers planning for changes to the Management system Standards.

Clause 7—Support: This clause deals with the resources needed for the Management system Standards, including people, infrastructure, environment, monitoring and measuring resources, knowledge, competence, awareness, communication, and documented information.

Clause 8—Operation: It involves planning and control, requirements for products and services, design and development, control of externally provided processes, production

and service provision, the release of products and services, and control of nonconforming outputs.

Clause 9—Performance Evaluation: The organization must monitor, measure, analyze, and evaluate the Management system standards performance. This includes customer satisfaction, internal audits, and management reviews.

Clause 10—Improvement: This clause requires the organization to identify opportunities for improvement, implement necessary actions to meet customer requirements, enhance satisfaction, and improve the QMS and its processes.

These clauses are designed to be applied in a Plan-Do-Check-Act (PDCA) cycle, promoting continuous organizational improvement.

2.3 Deming Cycle Approach

Plan, Do, Check, and Act, which can be explained through the following quote ISO 9000.

- PLAN Define the policy and the objectives and establish the processes to deliver results in line with meeting the customer, statutory, and regulatory requirements, and the organization's defined requirements.
 - DO Implement the processes.
- CHECK Monitor, audit, and review the performance evaluation against the defined documented information of processes and policies in the organization.
- ACT Based on performance evaluation, take actions in the form of improvements to ensure the organization meets the current and scale for future requirements

PDCA can be applied to the identified processes of value-adding, and this will emphasize the importance of understanding and meeting requirements, reviewing to evaluate the value-addition activities in the process, assessing results of the performance of the process, its effectiveness, and continuous improvements of processes based on objective measurement.

2.4 Principles of Quality Management Systems

Seven quality management principles (QMPs) for ISO 9000, ISO 9001, and related ISO quality management standards are based on these seven QMPs (ISO, 2015).

QMP 1 – Customer focus (Tricker, 2020), MSME organization can

- Identify the value chain of the organization from direct and indirect customers.
- Identify customers' current and future needs and expectations.
- Define the organization's objectives aligned with customer needs and expectations.
 - Communicate the customer's needs and expectations to interested parties.
- Planned, designed, developed, delivered, and supported the goods and services to meet customer requirements.
 - Analyze and evaluate customer satisfaction and take appropriate actions.
 - Focus on Relationships with customers to achieve success.

QMP 2 – Leadership (Tricker, 2020), MSME organization can

- Share the organization's strategic direction of Management system policy, vision, and mission.
 - Communicate the importance of a culture of trust and integrity.

- Encourage an organization's commitment to the company's policy.
- Ensure that leaders at all levels set an example to people in the organization.
- Provide adequate required resources, training, and authority to act with accountability.
 - Inspire, encourage, and recognize people's contribution
 - QMP 3 Engagement of people (Tricker, 2020), MSME organization can
 - Promote the importance of the people's contribution to the organization.
 - Promote collaboration.
 - Facilitate training.
 - Provide authorities within the role without fear of reprisal.
 - Appreciate with positive feedback
 - Performance evaluation of individual against defined objectives.
- Conduct a stakeholder survey and analysis, take relevant actions on the results, and communicate the results of such actions.
 - QMP 4 Process approach (Tricker, 2020), MSME organization can
 - Define the objectives of the system and the tasks necessary to achieve them.
 - Establish authority, accountability, and accountability for managing processes.
- Assess the organization's ability and plan for resource constraints before proceeding.
- Analyze the impact of modifications on individual processes in the system and their interdependencies in the organization.

- Manage processes and interactions to achieve the organization's goals and targets effectively and efficiently.
- Provide the necessary information to operate and improve the processes and monitor, analyze, and evaluate the system's performance.
- Manage risks that can impact the outputs of the processes and the overall outcomes of the quality management system.
 - QMP 5 Improvement (Tricker, 2020), MSME organizations can
 - Promote the establishment of improvements in all areas of the organization.
- Educate and train people at all levels on implementing essential tools and methodologies to achieve improvement objectives.
- Ensure that people are competent to promote and complete improvement projects effectively.
- Develop and implement strategies to implement improvement projects throughout the organization.
- Track, review, and audit improvement projects' planning, implementation, completion, and outcomes.
- Utilize improvement measures to develop new or modified goods, services, and processes and reduce the cost of poor quality.
 - Recognize and acknowledge progress.
- QMP 6 Evidence-based decision-making (Tricker, 2020), MSME organizations can

- Determine, measure, and monitor key indicators to assess the organization's performance.
 - Provide all information necessary to the relevant individuals.
 - Ensure that data and information are accurate, reliable, and secure.
 - use appropriate methods for information and Data Analysis.
 - Ensure that individuals are competent to analyze and evaluate data as needed.
 - Develop decisions based on evidence, balanced with experience and intuition.
 - QMP 7 Relationship management (Tricker, 2020), MSME Organizations can
- Identify relevant stakeholders (suppliers, partners, customers, investors, employees, and society) and their relationship with the organization.
 - Determine and prioritize interested parties that need to be managed.
 - Establish relationships that balance short-term gains with long-term perspectives.
 - Share organizational knowledge with relevant stakeholders.
- Communicate feedback related to the organization's performance to interested parties.
- Develop collaborative development and improvement activities with suppliers, partners, and other interested parties.
- Recognize improvements and achievements by suppliers and partners and encourage their appreciation.

These principles are not included in a priority order. The importance of each principle varies based on the organization's context and can change over time.

2.5 Establishment of the Management Systems

Phase 1: Gap analysis

In management literature, gap analysis involves comparing actual ways of working with potential or desired requirements (Tricker, 2020) – which, in this case, is benchmarked with ISO Management Systems.

Phase 2: Documentation of the systems

Standard and processed documents are required to establish the optimal model of the activities carried out in the organization and standardize the process.

This requires the study of:

- The main objectives and strategies to achieve these objectives
- The objectives and action plans
- Specific sector regulations
- Implement to fulfill the requirements
- The results generated in each of these transactions

Phase 3: Implementation of the Management System

the organization, based on the documented management system, shall execute the implementation plan for rolling out the management system, which typically involves

o Awareness training on the management system standard

Implementation training on the procedure, guidelines, and formats established

Updating the objective data by implementing the strategies defined for achieving the objectives

Performing internal audits

Analysis of data and summarizing the reports for management

Carrying out management review systems and documenting the minutes of the meeting.

Phase 4: Continual improvement and sustenance of the management system

The effectiveness and efficiency of the management system need to be monitored and measured. The implementation phase enables the organization to collect information regarding the process performance, and through internal audits, it allows organizations to identify and map the conformity to the process. The internal audit, analysis of data, and summarization of the management reports provide the organization with relevant data necessary to make decisions based on evidence and statistical performance of the processes through which continual improvement can be made. Achieve continual improvement by

Acting on Nonconformances identified in the processes

Taking actions based on analysis of data and trends of performances that are captured by identifying actions addresses the relevant factors

Initiating voluntary improvements for the efficiency and effectiveness of the processes.

This methodology ensures that activities within a system are embodied, accessible, relevant, and reliable.

2.6 Discussion

A list of leading Management Systems with a brief description of each is given below:

o ISO 9001:2015 | Quality management systems — Requirements

- ISO 14001:2015 | Environmental management systems Requirements with guidance for use
- ISO/IEC 27001:2022 | Information technology Security techniques —
 Information security management systems Requirements
- ISO 45001:2018 | Occupational health and safety management systems —
 Requirements with guidance for use
- These management systems enable organizations to be process-dependent and system-oriented. The people in any organization are subject to change, whereas the infrastructure and processes that follow stay in the organization till the age of the organization.
- O People dependent organization can have a quick turnaround for the decisions but puts the organization into a firefighting mode for all decisions, and such people-centric organizations have a tendency to halt the process in the absence of such vital persons; on the other hand, a well-defined management system empowers the organization by providing the operational know-how of each activity and during the documentation contingency and anticipated unforeseen situations can be evaluated and addressed by establishing mitigation plans which ensure the operations of the activity are not a halt.
- The management systems also give a platform for the organization to introspect into its process performance and enable evidence-based decisionmaking, which helps an organization to define effective strategies and

review its progress promptly to align and realign its efficiency in line with the policy, mission, and vision of the organization.

2.7 Summary

Management systems also enable MSME organizations to provide the transparency required for their operations and the credibility necessary for MSME to claim the efficient processes followed to deliver world-class products and services to its customers. Considering various initiatives by the Government of India, the management system is synergetic with the slogan "MAKE IN INDIA." It provides confidence that the products and services delivered by the organization are professionally managed and provide the exposure required to approach global customers to engage with business worldwide (www.makeinindia.com, n.d.).

CHAPTER III:

METHODOLOGY

3.1 Overview of the Research Problem

Since there is no compelling study available in the MSME website portal or any other area with ease of access relating to the management system and its impact on MSME, the scope of this research will be based on some of the management system excellence in manufacturing and service industries MSME (micro small and medium-sized enterprises) sector in Bangalore. As described in previous sections, failure in this context is, e.g., Complexity in understanding, personal dependency, and lack of standardized practices (Mahajan and Sidhu, 2020). Exploratory research is used when little is known about a new phenomenon; the topic is complex, available research results are limited, or insufficient theory. By nature, exploratory research is flexible but often concentrates on qualitative approaches (Bougie and Sekaran, 2016). Guided by the characteristics of the experimental study and to address the questions presented in the problem statement, a qualitative case study will be used.

"A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not evident" (Yin, 2014). According to Yin (Yin, 2014), a case study is appropriate when asking "how," "why," "what," and "who" questions and in the exploratory case study, the questions to be answered are: "how" and "what." The case can be an organization, individual, group, or situation that the researcher is interested in and wants to explore. To get insights into the case, the researcher must analyze the real-

life subject from many perspectives and use various data collection methods (Bougie and Sekaran, 2016). This research will use a multiple case study design as leaders represent more than one company. Regarding data collection, this case study research will not be limited to a sole data source. According to Yin (Yin, 2014), there are six sources of evidence in case studies: direct observation, interviews, archival records, documents, physical artifacts, and participant observation. Using more sources provides more evidence for the study. This research will include 12-16 interviews as the primary source and document analysis and archival records as the additional sources. The author hopes to reach more depth within the research using a blended methodology – interviews, document analysis, and archival records.

Interviewing helps the researcher collect data about topics that cannot be observed, which is widely used in research (Bougie and Sekaran, 2016). Depending on the questions raised, interviews can be structured, semi-structured, or unstructured (Coleman and Briggs, 2003).

The outcomes of the interviews, documents, and archival records will be analyzed and described to provide an in-depth view of the management system excellence in the manufacturing and service industries' MSME (micro, small, and medium-sized enterprises) sector in Bangalore. This study will be conducted between September 2023 and December 2023.

3.2 Operationalization of Theoretical Constructs

This study plans to use the structured interview approach, using closed-ended questions that would be composed before the interviews. The participants – leaders

representing MSME companies in Bangalore – will be interviewed personally (if there are no restrictions) or through a questionnaire approach. Respondents can answer closed-ended questions quickly, giving them the sense they are making satisfactory progress. Speedy response time per question means you can ask more questions on a broader range of topics (Hyman and Sierra, 2016).

The second source of data collection will be document analysis, a procedure of reviewing documents that can be printed and electronic (Bowen, 2009). Documents that may be evaluated as a part of the research can have different forms, e.g., press releases, annual reports, minutes of meetings, agendas, memoranda, letters, manuals, etc. Documents can provide, for instance, additional information on the environment where participants operate, may provide supporting research data, or raise other questions that should be asked (Bowen, 2009).

The third data source – archival records – is a method of data collection from existing sources. These can be public files, e.g., annual reports (Yin, 2014). According to Yin (2014), archival records are made for certain reasons and specific audiences, and these conditions must be considered when interpreting the records' accuracy. This research will use the MSME Portal's archival records and survey reports.

3.3 Research Purpose and Questions

For this research, there will be interviews, surveys, and reviews of books, journal articles, and other literature material that already exists. Surveys will be done to examine the correlation between different factors and their dependent attributes—a qualitative study with stakeholders from the MSME industry. The objective of this research is to combine

research with qualitative survey questions and its responses collected from stakeholders, study, analyze, highlight, and address the issue of Management System Excellence In the Manufacturing And Service Industries MSME (Micro, Small, And Medium Sized Enterprises) Sector In Bangalore and provide a solution framework for help organizations build effectively implement the management systems as applicable to the nature of their processes irrespective of its size and scale their businesses successfully.

Research questions for Business leaders:-

Primary questions: -

- 1. Which of these below options defines a successful management system?
- 2. Which of these options led to an effective management system implementation?
- 3. Which options do you follow to ensure the organization's management system can be sustained?
- 4. Which of these options enables you to decide which other management systems are helpful to your business?
- 5. Which of these options for challenges in your industry are addressed with the assistance of management systems?

Research questions for Managers and Employees:-

Primary questions: -

- 1. Which of these below are the challenges you faced while implementing the management system?
 - 2. Which of the below options were used to overcome those challenges?

- 3. Were there any trainings that you attended during implementation / for sustence of the management system? Yes or No?
- 4. Which of the options below helped you establish an effective management system?
- 5. Which learnings as a management system implementor do you want to share with others?

Follow-up and a secondary set of semi-structured questions for in-person or video conference interviews with all Business Leaders.

- 1. Management systems and what works best to address organization challenges.
- 2. Which management system category works well to help MSME business?
- 3. Best ways to align the employees to adopt and adhere to management systems.
- 4. Which phase of a management system do you want to simplify in implementing and adhering to it
 - 5. Solution Framework to help management system execution.

3.4 Research Design

A closed-ended questionnaire will be used to conduct the interviews. Each interviewee will get a form or document with the questions, fill in their responses, and submit it back to the researcher - in physical copy or online. The researcher will conduct a telephone conversation with the interviewee to understand the primary and secondary questions more in-depth for more qualitative feedback (Lee and Lee, 1999). After completing the interview rounds, the researcher will collate all the replies, analyze the study, and perform a text analysis of a model to arrive at a conclusive outcome. It is

important to note that some of the problems and results from literature review research have been considered for framing the questionnaire for the survey (Robinson, 2014). This ensures that the questions are relevant and appropriate to evaluating management system excellence in the manufacturing and service industries' MSME (micro, small, and medium-sized enterprises) sector in Bangalore. The variables resulting from some comparisons between the methods are addressed as part of the qualitative survey questions. However, qualitative survey feedback is given importance and priority in the research.

3.5 Population and Sample

Surveys are the most typical form of structured interviews, usually based on the research logic questionnaires utilized.

The questionnaire was entered into a Google Form and sent to the interested participants.

Figure 3.1 – google form survey link



- 1) Interviews are conducted with business leaders at executive levels of directors, business heads, proprietors, and managing partners who lead teams to understand the drivers to success.
 - 2) Interviews with employees who have been:-
 - a) suffers entirely in adopting the management system

- b) those who did not favor the implementation of the management systems.
- 3) Interviews were conducted with industry representatives to understand the opportunities or challenges of introducing management systems in their organization.

As presented by Bhattacharyya, a systematic, random sampling technique was used (Bhattacharyya, 2009). In this case, as a researcher, I considered the 100 companies' samples from MSME industries. The interview participants were considered knowledgeable and experienced enough to provide sufficient information and details regarding the impact of management systems in their organization.

3.6 Participant Selection

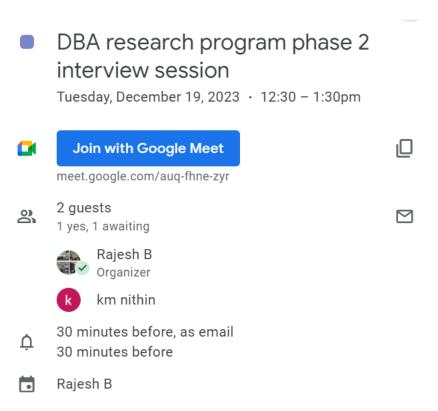
- I interviewed 100 Business leaders (Directors, Business heads, proprietors,
 Managing partners), each leading at least more than 25 people.
- 2. I interviewed 50 employees fond of implementing management systems in their organization.
- 3. I interviewed 50 employees who thought management systems were unsuccessful to them as they were too complex to understand and had shortcomings they encountered.

The interviewed individuals were from a diverse MSME business, were spread across age groups, and gender and diversity were considered to provide unbiased feedback. The same method was considered for all other groups to ensure impartial feedback was collected. The aim was to understand how the management system implemented in their organization has impacted the performance of the organization. Interviews were also conducted separately. Staff members from the management and employees were engaged.

The interviews aimed to acquire qualitative data on how the employees perceived the management system implementation and the significance of it in organizational change. The study also aimed to understand how the employees view the management system and how it impacts the organization's growth. Business Leaders are senior executives who define an operational ideology for the organization. Questions framed to these executives directly relate to their various anticipations of a management system. These executives' feedback will help address the core needs and requirements to establish a management system. Employees assigned a role to develop or implement management but could not be successful are on the list of interviewed people since they provide the contrary view to those who have successfully implemented the management system.

The interview is conducted in two stages. First, a questionnaire will be sent to the participants, followed by a telephonic conversation, preferably via ICT meeting tools such as Google Meet, WhatsApp app, or Zoom, and, wherever possible, a face-to-face in-person meeting to go into more profound insights into their opinions.

Figure 3.1 – Google Meet – meeting link for interviews with business leaders of the organization



3.7 Instrumentation

The research data was collated through a primary questionnaire and an open-ended conversation. The study used a framework with a list of open-ended and close-ended questions; the study was more structured, with questions followed by a semi-structured interview process. While the primary source of information was through the structured and semi-structured process of questions and interviews, the secondary methods used were to review documents, journals, government websites, employment data, and the success and failure of startups (Schoonenboom and Johnson, 2017). Semi-structured interviews help the researcher get more profound thoughts on potential solutions to the subject

management systems. The expertise of each of the participants and their experiences were presented, and the participants discussed specific solutions to critical problems in the interview process. The participants could have greater freedom to share their views as the concept of first doing the close-ended question close-ended questions is a qualitative, subjective discussion (Creswell, 2013). These questioning ways helped the researcher to explore more information than what is available on previously published information related to the management system and its impact on MSME industries and arrive at a framework for the solution to address the Management System Excellence in Manufacturing and Service Industries MSME (Micro Small and Medium Sized Enterprises) Sector In Bangalore.

3.8 Data Collection Procedures

The research study has two types of data (Castleberry and Nolen, 2018). The participants were provided with a questionnaire and individual interviews to collect the primary data. Using Google Forms, questions were prepared and sent to participants to complete their responses. Google Meet interviews were done as part of this method and, wherever possible, through in-person meetings. Regarding data collection for interviews, survey feedback is the most common way of gathering data for research studies based on qualitative methods. This study's primary source of information was through questionnaires and one-to-one interviews.

Secondary data is considered from literature reviews and relevant studies. Journal articles and textbook readings were considered for secondary data.

The participants were first provided a Google form, and the research purpose, objective, and process were explained to each. Upon their free willingness, the participant would fill in the Google form - questionnaire links sent to their mobile number/email IDs and be provided with seven days to complete and return the survey. The standard time that was expected to complete the study was 15-20 minutes. After receiving the survey res, the findings were consolidated. Later, the participants were contacted for a telephone conversation and requested to join the one-to-one discussion via a Google Meet, Zoom call, or in-person face-to-face meeting. 30-45 minutes per participant was invited for the online or face-to-face interview in person if possible, and it was mutually acceptable to the responder and researcher. The minutes of the interview were written down and consolidated with verbal consent from the participant. The interview outcome was comments, observations, and feedback from experience by the participants (Bowling and Shah Ebrahim, 2013).

3.9 Data Analysis

Data analysis and data collection are interdependent. After collecting the initial data, the researcher begins the data analysis. Once concepts are derived from the data analysis of the assessment in terms of acceptable standards of reliability, as well as improvements that could be applied to the implementation aspects of the management system, their relative importance in an assessment, and their ability to align with the stated objectives for the intended outcomes of the management, could lead to improvements in how MSME industries can excel in management systems.

The data collected from the interviews from Google Forms was exported to an MS Excel sheet to simplify the discussion process. Specific data were tabulated, and graphs were generated to represent the data and its correlation. In thematic analysis, Bhattacharyya (Bhattacharyya, 2009) explains that data is gathered through interviews and background research. Based on the research objectives, the data is categorized by the researcher. Grouping of data based on applicable classification so that the data analysis and evaluation were done effectively and logically. The qualitative data was analyzed qualitatively based on the personal views and information provided by the respondents. The researcher categorized and descriptively evaluated the information.

Thematic analysis is a descriptive method that helps reduce data and makes it more flexible to interpret. The first step is to find a meaningful way to compile and organize the results (Castleberry & Nolen, 2018). The study used Google Forms, Microsoft Word, and Microsoft Excel for the data collection process, and as part of the analysis, a text analyzer was used to pick up key trends, themes, and shared variables using Sea Scout. The following steps were done as a process to analyze the data.

- 1. Review the data to ensure a complete understanding of the information gathered. Since the data set was extensive and lengthy, it was organized by categories; segregating by categories helped analyze specific areas and compare each area of response amongst the different categories of participants.
- 2. Using text analyzer technology, lengthy sets of verbatim feedback were quickly converted into common themes and critical highlights.

Qualitative study depends on how valid the study is from a data dependability and credibility point of view (Lakshmi and Mohideen, 2013). Validity describes the extent to which a measure accurately represents the concept it claims to measure. Based on the works presented by Bhattacharyya (Bhattacharyya, 2009), validity and reliability were considered to be the key focus of this analysis. Specific criteria were applied to select only the relevant articles and literature to support the study. During the study, competent individuals were interviewed as participants to ensure the results obtained had better rationality. Additionally, no incentives were used to convince the participants, which is disadvantageous to the validity of the study findings. The participants were provided adequate advance notice, plenty of time was provided to complete the survey, and the interviews were conducted in a manner that was convenient to the participant. Confidentiality was assured and will be maintained to ensure participants were honest in their feedback. Along with the qualitative data, studies were done from existing literature, journals, and textbooks. The uniformity of questions and responses and the decent sample size ensured a high probability of data satiety. Every idea, reference, and information obtained from other sources is guaranteed to be correctly referenced and cited to avoid plagiarism. This research's validation and trustworthiness method is based on credibility, transferability, dependability, and conformability (Lakshmi and Mohideen, 2013). Data collection for this research included several methods, such as questionnaires, interviews, observations, documents, and literature analysis. Recently, qualitative research has been criticized for its lack of rigor in terms of minor or no justifications for the sample sizes used in research (Marshall et al., 2013). The study has a good sample size, which helps to ensure higher validity and reliability; sample nos are so selected to ensure data saturation occurs among a relatively homogeneous population (Boddy C.R., 2016)

3.10 Research Design Limitations

The Manufacturing And Service Industries MSME (Micro, Small, And Medium Sized Enterprises) Sector In Bangalore was considered the homogeneous population for this study. This meant that the research and the results were limited to the chosen industry and geographical environment. It was further limited to a Manufacturing And Service sector only. The organization's selected individuals were contacted, such as the business leader, a team involved in successfully implementing management systems and a limited set of individuals who perceived these systems to be ineffective in MSME excellence; many departments, such as quality, testing, research, and development, etc. can also be individually sampled to understand their point of view in an individual manner. This factor, to some extent, undermined the results. Additionally, the limited, close-ended questions presented a considerable challenge and critical limitation of this research. The data collected from the participants during the process were assumed to be honest and integrity and considered unbiased since the participants voluntarily agreed to participate in the study (Sin, 2005).

3.11 Conclusion

This study's findings could help further analyze the management system excellence in the manufacturing and service industries' MSME (micro, small, and medium-sized enterprises) sector in Bangalore. Survey and interview research methods were used.

- 1. I interviewed 100 Business leaders (Directors, Business heads, proprietors, and Managing partners) from people-based businesses, each leading at least 25 people.
- 2. I interviewed 50 employees fond of implementing management systems in their organization.
- 3. I interviewed 50 employees who had the impression that management systems were unsuccessful to them as they were too complex to understand and had shortcomings they encountered.

They were sampled from the Manufacturing And Service Industries Msme (Micro Small And Medium Sized Enterprises) Sector In Bangalore. The data collected were analyzed thematically and presented using the relevant charts and tables to simplify the subsequent discussion, evaluation, conclusion, and recommendations.

The research methods, including quantitative and qualitative, have been reviewed. The rationale and reasoning to support the study are discussed in this chapter. Questionnaires and interviews were used as primary and secondary mechanisms while studying journals, website-published articles, posts, literature, and books, which were conducted to validate the findings further.

CHAPTER IV:

RESULTS

4.1 Results of Survey

This section provides the results of the research findings from a study that aimed to understand how Management System Excellence In Manufacturing And Service Industries MSME (Micro, Small, And Medium Sized Enterprises) Sector In Bangalore. The research was carried out using a mixed-methods technique, which included a questionnaire and interviews with the members of the Enterprises. The research intended to understand the implications and practical ways that were managed for the management system's excellence in the organization and to understand the employees' responses to this subject of the study. In addition, the purpose of the research was to get an understanding of how the staff members and leadership handled the Management System Excellence.

100 Business leaders (Directors, Business heads, Proprietors, Managing partners) from people-based businesses, each leading at least 25 people, 50 employees who were fond of management systems implementation in their organization, 50 employees who had the impression that management systems were unsuccessful to them. Those who favor the management system are categorized as "positive," and those who do not select the management system are classified as "negative." The research successfully gained valuable insights from the comments received, and the conclusions offered in the chapter are based on these responses.

Table 4.1: Response to Distribution of Data

Response result	Business Leaders	Managers and	Managers and Employees
		Employees	not Favouring
		Favouring	management system
		Management System	
Distributed	100	50	50
Responded	100	50	50

Figure 4.1: Response to Distribution of data

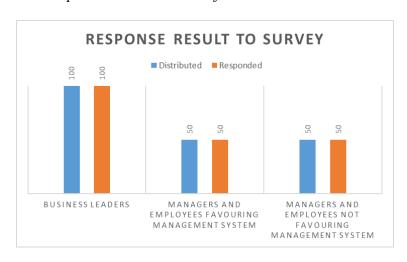
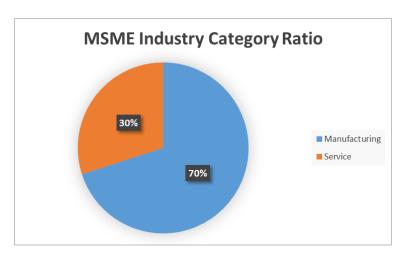


Table 4.2 Companies and their employee sizes

No. of MSME companies	Employee Size	No MSME Companies	Employee Size
8	28 employees	5	36 employees
5	29 employees	6	37 employees
6	30 employees	7	38 employees
6	31 employees	6	39 employees

4	32 employees	8	40 employees
8	33 employees	7	41 employees
6	34 employees	12	42 employees
6	35 employees		

Figure 4.2: MSME Industries Category Ratio sampled



4.2 Research Question One: Research Questions for Business Leaders

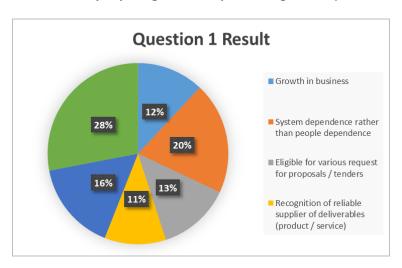
A sample of 100 business leaders was chosen for the survey, and 100% of the business leaders who participated completed the study.

Question 1. Which of these below options defines a successful management system?

Table 4.3 Results of defining a successful management system

Effective results in process efficiencies	28%
System dependence rather than people dependence	20%
Clearing Customer Audits	16%
Eligible for various requests for proposals/tenders	13%
Growth in business	12%
Recognition of reliable supplier of deliverables (product/service)	11%

Figure 4.3: Results of defining a successful management system



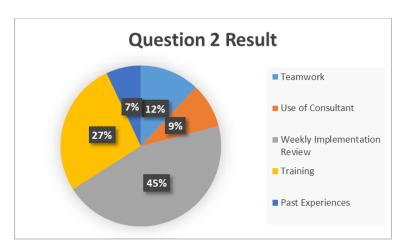
The business leaders provided the opinion that the best result a management system excellence could deliver to their business was Effective results in process efficiencies and, at least, Recognition as a reliable supplier of deliverables (product/service).

Question 2. Which of these options led to an effective management system implementation?

Table 4.4 Results for factors that influence the effective implementation of the management system

Weekly Implementation Review	45%
Training	27%
Teamwork	12%
Use of Consultant	9%
Past Experiences	7%

Figure 4.4: Results for factors that influence the effective implementation of the management system



The business leaders provided the opinion that the best factors influencing the effective implementation of the management system excellence are the Weekly Implementation Review and Past Experiences.

Question 3. Which options do you follow below to ensure the organization's management system can be sustained?

Table 4.5 Results for adequate sustenance of the management system

Quarterly Internal Audits	32%
Monthly Management Review on the performance of the management system	27%
Training	24%
Certification Audits / Fear of losing certification	17%

Figure 4.5: Results for adequate sustenance of the management system



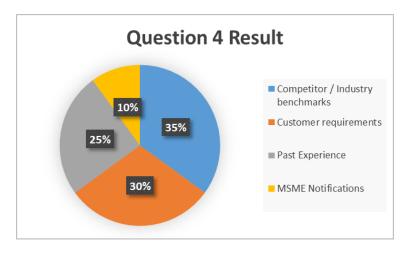
The business leaders believed that the best factors for adequate sustenance of the management system excellence are quarterly internal audits and least certification audits/fear of losing certification.

Question 4. Which of these options enables you to decide which other management systems are helpful to your business?

Table 4.6 Results for factors that influence the decision on which other management systems are helpful to your business

Competitor / Industry benchmarks	35%
Customer requirements	30%
Past Experience	25%
MSME Notifications	10%

Figure 4.6 Results for the factor that influences the decision of which other management systems are helpful to your business



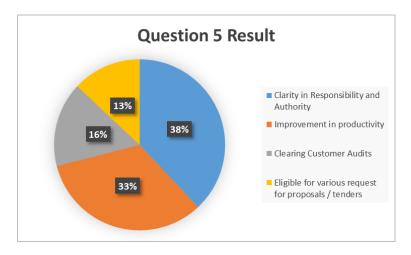
The business leaders provided the opinion that the best factors influencing the decision on which other management systems are helpful to your business are Competitor / Industry benchmarks and MSME Notifications.

Question 5. Which of these challenges in your industry below is addressed with management systems?

Table 4.7 Results show that the challenges your industry faces are addressed with the assistance of management systems.

Clarity in Responsibility and Authority	38%
Improvement in productivity	33%
Clearing Customer Audits	16%
Eligible for various requests for proposals/tenders	13%

Figure 4.7 Results for challenges your industry faces are addressed with the assistance of management systems.



The business leaders provided the opinion that the best challenges in your industry are addressed with the assistance of management systems: Clarity in Responsibility and Authority and least being Eligible for various requests for proposals/tenders.

4.3 Research Question Two: Research Questions for Managers and Employees

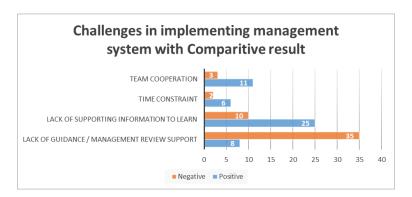
Managers are employees / staff-level individuals sampled in this research question set. Those who favor the management system are categorized as "positive," and those who do not select the management system are classified as "negative."

Question 1. Which of these below are the challenges you faced during the time you were implementing the management system?

Table 4.8 Results for challenges you faced during the time you were implementing the management system

	Positive	Negative
Lack of Guidance / Management review support	8	35
Lack of supporting information to learn	25	10
Time Constraint	6	2
Team Cooperation	11	3

Figure 4.8 Results for challenges you faced during the time you were implementing the management system

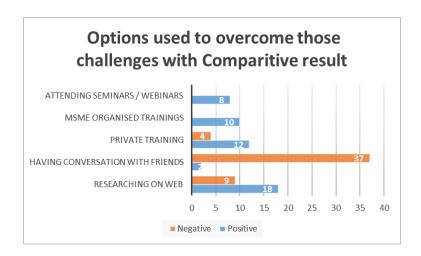


Question 2. Which of the options below was used to overcome those challenges?

Table 4.9 Results for options used to overcome those challenges

	Positive	Negative
Researching on web	18	9
Having conversations with friends	2	37
Private training	12	4
MSME organized training	10	0
Attending seminars/webinars	8	0

Figure 4.9 Results for options used to overcome those challenges

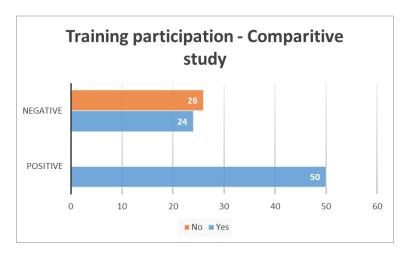


Question 3. Were there any trainings that you attended during implementation / for sustence of the management system?

Table 4.10 Results of training participation

	Positive	Negative
Yes	50	24
No	0	26

Figure 4.10 Results of training participation

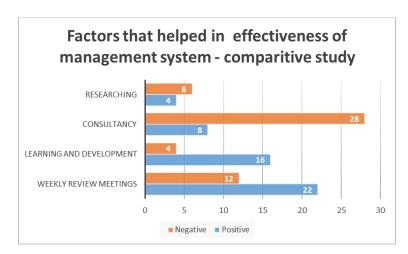


Question 4. Which of the options below helped you establish an effective management system?

Table 4.11 Results for options that helped you to establish the effective management system

	Positive	Negative
Weekly Review Meetings	22	12
Learning and development	16	4
Consultancy	8	28
Researching	4	6

Figure 4.11 Results for options that helped you to establish the effective management system

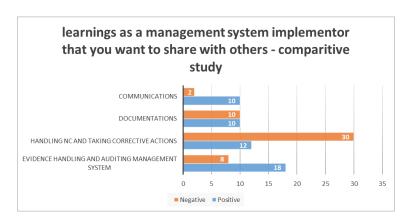


Question 5. Which of these learnings as a management system implementor that you want to share with others?

Table 4.12 Results for learnings as a management system implementor that you want to share with others

	Positive	Negative
Evidence Handling and Auditing Management System	18	8
Handling NC and Taking Corrective Actions	12	30
Documentations	10	10
Communications	10	2

Figure 4.12 Results learnings as a management system implementor that you want to share with others



4.4 Research Question Three: Interview Results

Follow-up and a secondary set of semi-structured questions for in-person or video conference interviews with all Business Leaders. Five questions were chosen for the interviews. The interview questions were of narration type.

Text analysis was used in developing themes of keywords identified from interview narrations; the interview results are categorized into thematic areas and presented using relevant tables and charts.

Question 1. Management systems and what works best to address organization challenges.

Figure 4.13 Results of themes that work best to address organizational challenges

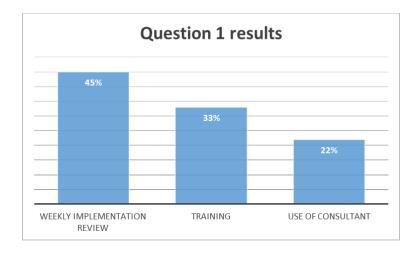
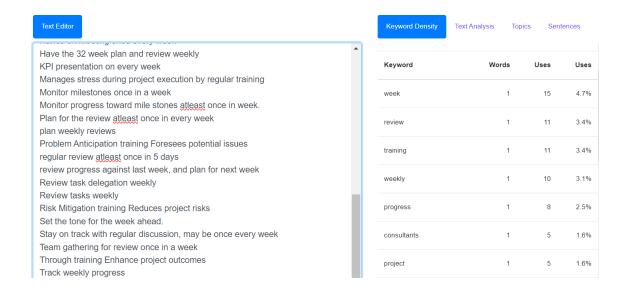


Table 4.13 Indicating a few narratives by respondents for themes that work best to address organizational challenges

Adapt to progress based on weekly	Consultant helped to streamline the processes,
targets that are met	optimize workflows, and enhance productivity

Aligns all tasks weekly	Consultants bring domain-specific knowledge and experience to overcome those challenges.
Allocate time for a weekly review of progress	Hands-on meeting once every week
Assign and review task progress every week	Have the 32-week plan and check weekly
Boosts team leadership skills through training	KPI presentation every week
Calibrate once every week.	Daily standup call review
Calibrate once a week.	Training Enables effective project planning.
Clarify the progress every week.	Every Wednesday, the progress review

Figure 4.14 Examples of Results of Data Text Analyzer based on Narratives by participants



Question 2. Which management systems are working well to help MSME business? Figure 4.15 Examples of Results of management systems working well to help MSME business.

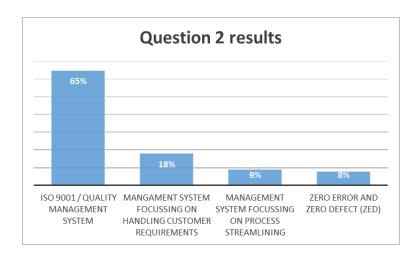


Table 4.14 indicates that a few narratives by respondents for management systems are working well to help MSME businesses.

ISO 9001
Quality Management System
Process management
That which addresses customer requirements
ZED
Meeting Customer Requirements
QMS
QMS
QMS
Quality Management System

Question 3. Best ways to align the employees to adopt and adhere to management systems.

Figure 4.16 Examples of Results of ways to align the employees to adapt adherence to management systems

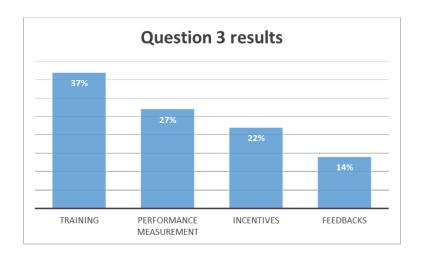


Table 4.15 Indicating few narratives by respondents for ways to align the employees to adapt and adhere to management systems

Train them
Tag to the KRA for their role
Provide feedback
Attractive incentives
Through training
Learning and development sessions
Monetary benefits

Performance appraisal

Question 4. Which phase of a management system do you want to simplify in implementing and adhering to it?

Figure 4.17 Examples of Results of Which phase of a management system you want to simplify

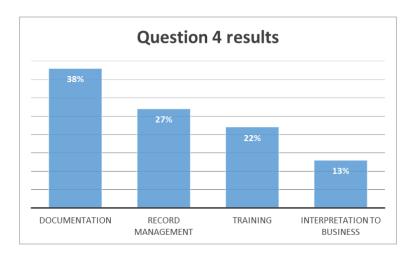


Table 4.16 Indicating a few narratives by respondents for Which phase of a management system you want to simplify

Documentation tires the employees	Record Storage
Of course, documentation	Storage of registers
lengthy documentation	Drafting procedures
Volumes of pages to be written	SOP management
Retention of records	Customizing to fit our needs

Record retrievability	Lengthy training sessions
Disposition of records	Long training hours
SOP, SOP, SOP. Goes on	Training workshops

Question 5. Solution Framework to help management system execution.

Figure 4.18 Examples of Results of Framework to help management system execution

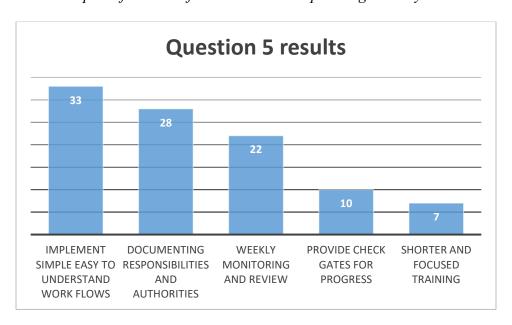


Table 4.17 Indicates a few narratives by respondents for Results of the Framework to help management system execution.

Simple flow charts can be used	Monitor the implementation
Reduce heavily narrated SOP.	JD for all tasks
Establishing role clarity	documenting and communicating
	responsibilities
Visual work instructions	Flowchart way of communicating system

Process flow charts	Work process flow management
Maker and checker	Reducing too much paper works
Quality gates before proceeding to the next	Use a simple way of communicating the
activity	process

4.5 Summary of Findings

Surveys with the Business leaders indicate that a successful management system contributes to Effective results in process efficiencies, and second most is in System dependence rather than people dependence, Clearing Customer Audits, Eligible for various requests for proposals/tenders, Growth in business and Recognition of reliable supplier of deliverables (product/service) are considered as the definitions of a sound management system. Business leaders have expressed that a Weekly Implementation Review is essential for effectively implementing the management system. Training was the other area that was identified as a critical factor. Quarterly Internal Audits and Monthly Management Reviews on the management system's performance were the essential options favored by business leaders to ensure the management system could be sustained. Competitor/industry benchmarks, customer requirements, and experience are the critical enablers that business leaders consider when deciding which other management systems are helpful. The challenges in the industry are addressed with the assistance of management systems, which are Clarity in Responsibility and Authority and productivity improvement.

Lack of guidance/management review support, lack of supporting information to learn, time constraints, and team cooperation are challenges managers and employees face

while implementing the management system. Managers and employees - the staff of the organization provided the opinion that Researching on the web to overcome those challenges was favored by those showing interest and were optimistic about implementing the management system versus Having a conversation with friends was selected by those not showing interest and were harmful in implementing the management system. Training and weekly review meetings were the critical areas that were effective in establishing the effective management system implementation / for the sustenance of the management system. Those successfully implemented had positive learnings, such as Evidence handling and Auditing Management systems, and those whose participation lacked effective implementation had more learnings regarding Handling NC and Taking Corrective actions.

The results of the interviews saw varied responses to each question, and the analysis focused on picking the top keywords of reactions. Business leaders' Weekly Implementation Review and Training work best to address organizational challenges. It could be considered that business leaders' expectations from a successful management system also were a clear indication of the goals and expectations their organizations had from the management system, such as Effective results in process efficiencies, and second most are in System dependence rather than people dependence. Business leaders believe that ISO 9001 / Quality Management System is the best management system to suit the organization. This management system standard ensures that an organization, product, or service is consistently delivered through effective quality planning, quality assurance, quality control, and quality improvement. This management system focuses on handling, identifying, and fulfilling the customer's requirements. The management feels a quality

management system increases customer value, customer satisfaction, customer loyalty, repeat business, the reputation of the organization, expansion of the customer base, and increase in revenue and market share.

The business leaders opined that the best ways to align the employees with adhering to management systems are through training, performance measurement, and providing incentives that motivate the organization's personnel to participate positively in the implementation. To simplify implementing and adhering to the management system, the business leaders stated that Documentation and Record management areas should be streamlined to ensure the sustenance of such systems does not burden the organization process. Implementing simple, easy-to-understand workflows, documenting responsibilities and authorities, and weekly monitoring and review are the framework themes supported by leaders to help manage system execution.

4.7 Conclusion

The research results indicate how important a management system is to the MSME for its transformation, framework, and initiatives that have to be followed for the MSME to excel in its management system implementation. Based on comments from the survey participants and those interviewed, it significantly affects how business leaders, managers, and staff regard the management system implementation process. This proves the need to implement an effective management system within the organization since this may substantially influence the employees' adherence to the management system.

As indicated in the survey results, 200 individuals participated in the survey, with 100 of them as business leaders and 100 of them coming from the management and staff

category. The data gathered gave beneficial insights into the steps used to implement the management system.

As per the results indicated in the survey and interviews, participants involved in regular review and training saw a more effective way of implementing the management system. This may be because the business leaders of such organizations believed that periodic reviews and training could ease the implementation of management systems effectively in their organizations. On the other hand, regarding the impact of management systems on employees during implementation, the participants who were unfavorable/adverse to it voiced their discontent with the implementation since they believed it was a complex system to understand and follow.

The research results indicate that the challenges management approach used throughout the process were not similar across all organizations. This finding highlights the need for an effective, consistent, and successful implementation process. The comments left by the participants further demonstrated that it is essential to keep simple workflows, regular reviews, and shorter training with workers to guarantee that they comprehend the implementation process and the part they play in it. A good review and communication system helps to develop trust and confidence among workers, which is vital for a successful management system implementation process. This is an essential component of a successful management system implementation.

The results of this study lend confidence to the description and literature in books and articles that emphasize the significance of defining responsibilities, implementation review, and lean process flows leading to the effectiveness of management systems in MSMEs. Simple documentation allows workers to grasp the logic behind the workflow, the sequence of the interactions, and the possible outcomes, which makes it simpler for them to accept and adhere to the process. In addition, efficient reviews help reduce the failure and challenges experienced by workers, leading to increased acceptance of the system and commitment to implement systems effectively.

The significance of leadership in effectively managing the management system implementation was another outcome of the study's results. There has to be a sound review system to be followed; there has to be a commitment by business leaders who can dedicate their time to have quick checks on their managers and staff handling the implementation of such management systems. The organization's leaders are responsible for being proactive in their communication, ensuring that all employees are kept informed on the importance of adherence to the management system; it is also one of the principles of effective implementation of the management systems.

In conclusion, this study indicates how vital management system implementation is in enabling the excellence of the management system for the MSME industries. The responses to the survey and the interviews provided details on how important it is to effectively implement in a way that is understandable, consistent, and open to review, particularly during times of challenge management for implementation. The results also underlined the need for which type of management across sampled MSMEs and the significance of a robust review system in the management of implementation. Building trust, confidence, and dedication among workers may be accomplished via an effective review system, which leads to their cooperation and acceptance of this management

system's effective implementation and sustenance. At times of implementation, organizations should prioritize developing efficient job responsibilities and review systems since this factor may considerably influence the success achieved for the management system excellence in MSME industries. A detailed analysis of the survey and interview is carried out in the next chapter.

CHAPTER V:

DISCUSSION

5.1 Discussion of Results

The study aimed to understand the challenges MSMEs faced and what initiatives were taken to bring them over as factors that influence the business leaders, managers, and staff/employees in effectively implementing and sustaining the management system. The study also aimed to establish the key factors that can make the management system successful or fail due to ineffective implementation. To address the study objectives, 200 survey participants were contacted in MSME industries, 100 in business leadership positions, and 100 in managers' and staff/employees' positions, with the second population favoring the implementation and a few selecting the implementation. All 200 people responded to the surveys, and 100 business leaders from the MSME organizations were also interviewed to obtain an in-depth evaluation of the subject. The outcome of the literature review done for this research showed that irregularly planned implementation reviews and lack of training are prominent causes of organizational failure to implement the management system effectively. Poor implementation costs organizations a lot of money. It leads to customer dissatisfaction, employee dissatisfaction, loss of jobs, and impacts livelihood, eventually leading to a lack of scale and growth, organizations running out of business, and finally shutting down. The interview sessions also included discussions where business leaders shared their past experiences where, due to poor management system implementation, organizations could not sustain their business management systems established to comply with the management system criteria. Also, they could not scale and grow their business, and in many cases, it resulted in a lack of revenues, growth, customer churn, and employee dissatisfaction.

Substantial research evidence identified implementation review, training, and simplified documentation needed for a successful management system implementation. The research pointed to weekly implementation reviews required to effectively implement and sustain the management system, training, the importance of simplified management of documented information, and defining roles and responsibilities necessary for effective implementation.

Based on the data collected, analyzed, and evaluated from the survey that has been completed until now, the following steps would be to provide a solution framework that will help organizations establish, implement, and continually improve their management systems; the framework will also make suggestions for enabling adequate sustenance of management systems in a simplified manner. Therefore, weekly progress reviews, training, establishing the responsibilities and authorities for the different roles in the organization, and providing feedback to employees are essential to creating, supporting, and improving the management system. The rest of this research will discuss the outcome of the in-person or video conference interviews with all the participants. The objective is to identify the possibilities and courses of action to be taken by organizations that can lead to effective management system excellence in the MSME organization.

5.2 Discussion of Research Question One

The first questions were targeted to the business leaders: "Which of these options below define a successful management system?" were broadly consistent with the findings

presented by (Kazmi and Naarananoja, 2014). These authors suggested that an effective management system shall enable organizations to continue self-improvement and selfassessment, adopt best management practices, and strive for disciplined and organized planning. The feedback regarding this question was mainly in line with these findings. 28% of the population believed that a management system should yield Effective results in process efficiencies, 20% of the population thought that a management system should pay for System dependence rather than people dependence, and nearly 48% of the population voiced the opinion that a would management system should deliver efficient process and system dependent way of working. According to Spivak (Spivak and F Cecil Brenner, 2001), Total quality management principles and practices of continuous improvement, including ISO 9001 certification, have become an essential requirement or benchmark against which other entities are measuring themselves. Throughout the realization of the Management systems in businesses, effective processes and system-dependent activities are highlighted as being of utmost significance in the survey results in analyses based on the narratives received from respondents. According to Malik (MALIK, 2009), establishing a process is critical in enabling companies to reach their business goals efficiently and effectively. When management systems are implemented, the employees can either embrace or fight against them; nonetheless, it is beneficial to implement them effectively and encourage them to adhere to the process. A practical implementation helps employees appreciate the advantages of implementing the management system and maintains a favorable situation that enables adequate sustenance. Since the management of any organization feels process management and system dependence are critical aspects of the management system, if the employees understand this message, they will be in a better position to accept and successfully contribute to the implementation readily. Challenges faced in business, such as attrition, communication issues, and system dependence on efficient processes, are crucial.

Here are specific suggestive ways that organizations can effectively be systemdependent rather than people-dependent with effective results in process efficiency.

Establish SMART Goals. Having SMART goals is crucial. Most organizations today follow the SMART goal-setting framework. While deciding the SMART goals, it is essential to ensure the following:-

S: Specific: For a goal to be practical, it needs to be specific. There has to be exact information on what details are to be achieved. Example: Increase the website footfall by creating targeted social media campaigns.

M: Measurable: Criteria to measure the goal has to be defined. Example: Increase the sales revenue by 10%.

A: Achievable: This is when you give yourself a severe reality check. Goals should be realistic – hence, benchmark to a baseline. Are you sure you can do this, as against the identified baseline? Example: let us say the industry is growing at a rate of 15%, and you are seeing that the market share you possess is less, and you have suitable inventory to meet the market demand; you are growing at 6-7% per year, then providing a target of 10% makes it reasonably achievable

R: Relevant: Important questions such as Does this seem worthwhile? Is this the right time? Does this match our other efforts/needs? Is it applicable in the current

business/market social and economic environment? The defined goals align with the employee's role and the organization's overall objectives. Example: An increase in sales revenue is an essential goal for the marketing team, and the company also focuses on the same and has an action plan to achieve it.

T: Time-bound: Have a timeline as to when the goal shall be achieved. Questions such as When? What can I do in a quarter from now? What can I do six weeks from now? What can I do today? Example: Increase the sales revenue by 10% every quarter for every product line in the organization.

This will ensure that employees have their total commitment to the organization's goals, and the organization's goals will become their own goals; all of this leads to commitment and motivation for employees to give the best of themselves for their professional success and the success of the organization enabling Effective results in process efficiencies and System dependence rather than people dependence.

5.3 Discussion of Research Question Two

The second question required the respondents to identify Which of the provided options led to effective management system implementation; Weekly Implementation Review was favored by 45%, and Training was selected by 27%. Organizations can effectively implement such management systems if the management focuses on the weekly reviews and provides employee training. To handle the rapidly changing business scenarios, the MSME industries must plan to meet the prerequisites of many business opportunities that require management system certifications; if such communications are effectively informed with their employees, they are well engaged, motivated, and

committed to the implementation process. Regular review to address employee concerns, manage resistance, and facilitate a smooth implementation is critical for the implementation process.

Here are some reasons why weekly review meetings and regular training are essential during the implementation process:

Effective Weekly review and regular training foster collaboration among employees and stakeholders during implementation. By sharing information and working together, teams can better understand the implementation and its impact and work collaboratively to implement it.

Weekly review and regular training encourages engagement by involving employees and stakeholders in the implementation process. By soliciting feedback, suggestions, and ideas, employees and stakeholders feel they have a voice in the process, increasing their engagement and buy-in.

Weekly review and regular training helps to create awareness about the implementation process among employees, stakeholders, and other parties involved. It helps everyone understand why the implementation is necessary, what it entails, and how it will affect them.

Weekly reviews and regular training clarify the implementation process, including what is implemented, how it will be implemented, and the timeline for implementation. This helps to minimize confusion and misunderstandings that can arise during the implementation process.

Weekly review and regular training helps manage resistance to the implementation process. By being transparent and open about the reasons for the implementation, addressing concerns and questions, and providing support and resources, leaders can help reduce resistance and increase acceptance of the implementation.

Effective weekly reviews and regular training foster collaboration among employees and stakeholders during implementation. By sharing information and working together, teams can better understand the implementation and its impact and work collaboratively to implement it.

Effective Weekly review and regular training help build support for the implementation process. By communicating the benefits of the implementation and how it will positively impact the organization, employees, and stakeholders are more likely to support it.

Weekly review and regular training increases accountability during the implementation process. By clearly communicating roles, responsibilities, and expectations, employees and stakeholders are more likely to take ownership of their responsibilities and be accountable for their contributions to the implementation process.

Weekly reviews and regular training are crucial during the system implementation process. It creates awareness, builds support, provides clarity, encourages engagement, helps manage resistance, facilitates collaboration, and increases accountability. By communicating effectively, organizations can ensure the system's successful implementation process.

5.4 Discussion of Research Question Three

The third question required the respondents to identify which of the below options they follow to ensure the management system can be sustained in the organization; Quarterly Internal Audits were favored by 32%, Monthly Management Review on the performance of the management system was selected by 27%, and Training was chosen by 24%. Internal audits play a vital role in the governance of the system, and an internal audit followed by a management review is not only the requirements criteria of a management system but also an essential step for effective implementation and sustenance of the management systems (Phillips, 2015). The survey results showed that quarterly internal audits, with monthly management reviews on the management system's performance and training, are widely suggested strategies to strengthen the management system within the organization. Here are some reasons why Quarterly Internal Audits, with Monthly Management Reviews on the performance of the management system and Training, is a widely suggested strategy to strengthen the management system within the organization is essential during the implementation process:

Risk-based management – internal audits – provides the exposure and transparency of the effectiveness of the system sustenance and continuing implementation.

Taking Corrective Action – based on the discrepancies identified in the audit, the implementor can take corrective action to align the system.

Familiarity with process compliances – audits enable the implementor to regularly check on the sustenance of the defined systems there by which allows the organization to adhere to the practices and also get familiar with the same

Feedback to management – regular input to the top management can be provided on how the system is sustaining to gather their insights and take the necessary actions to ensure the goals established around the management system can be effectively achieved.

Teamwork – regular training sessions help teams collaborate, discuss and share ideas, brainstorm possibilities to overcome challenges, and improve teamwork.

5.5 Discussion of Research Question Four

The fourth question required the respondents to identify which of the options below enabled them to decide which other management systems were helpful to their business. According to Spivak (Spivak and F Cecil Brenner, 2001), this is important since mandatory standards are often cited as reasons for technical trade barriers. An excellent exposition and analysis of these themes, the subject of a major study by the committee on the Organization for Economic Cooperation and Development (OECD) consumer policy, is available. 35% provided the opinion that Competitor / Industry benchmarks, 30% provided the opinion that Customer requirements and 25% provided the opinion that Past Experience gave them a choice to decide on which standard suits them the most, so there is nearly 90% of influence to the decision makers or leaders of the organization on management systems is necessary out of which almost 65% is a decision due to external force and 25% is partially again external may be due to their past work. Hence, confidence in choosing a management system is evident in the organization. The factors why considering competitor/industry benchmarks and customer requirements is better for any MSME organization are as follows:

Overdo – MSME organizations are lean and do not have too many resources at their ease; hence, ensuring that you benchmark to the management system that most of them in the industry are having or competition is having makes sure you do not drain your efforts unnecessarily at the same time taking care of the minimum checkboxes to stay at par with the competition.

Management buy-in – business leaders have to convince their top management or partners or directors to have a management system – their decision favourability is easy if there is a driving factor which can be stated that it's a customer requirement and hence needed.

Confident to execute –experience brings in the credibility of a result demonstrated in the past, which they can count on during their selection of the corresponding management system.

5.5 Discussion of Research Question Five

The fifth question required the respondents to identify which of the below options for challenges in your industry are addressed with the assistance of management systems. 38% stated that there is Clarity in Responsibility and Authority, and 33% said there is productivity improvement, nearly 71% indicated that management systems have assisted in overcoming the challenges faced by MSME organizations. Past research studies suggest that the sector, consisting of 36 million units, employs over 80 million persons today. This MSME Sector, having more than 5,000 products, contributes to more than 8% of India's GDP, 45% of its total production, and 40% of India's exports (Kochukalam, Peters, and

Thomas, 2016). The study also indicated that the lack of role clarity of persons and productivity is a pressing issue for MSMEs.

Management systems can address this issue; here is why management can assist organizations to fulfill this challenge as per the requirements of the standard: Clause 5.3 and Clause 9.1.1 of the ISO 9001:2015 (Cianfrani and West, 2016) state that for every role identified in the organization for fulfilling the processes to achieve the scope of the management system the responsibilities and authority of such roles be defined, documented and communicated to the individuals to that they understand its essential and adhere to it, along with further requirements of performance evaluation which requires the organization to identify and measure the process and product performance and take actions when the desired results are not attained through productivity can be achieved.

5.6 Discussion on comparative analysis on the next set of questions

Fig. 4.8 - Fi. 4.12 indicates the results of such comparisons; let us analyze the participants' responses to similar survey questions based on their favorability to the management system. This comparative study intends to identify similarities or differences of opinion to the same question between the managers and staff who were unsuccessful or had successful management implementation. The earlier responses will be mapped along with a comparative study to make the findings comprehensive.

The people with an unfavorable opinion of management systems indicated that the Lack of Guidance / Management review support was their biggest challenge compared to those who had a favorable opinion of management systems, which showed a Lack of supporting information to learn as their biggest challenge.

People with positive opinions on management systems have also raised the challenges related to team cooperation and time management. In contrast, people with opposing views on management systems, citing a lack of guidance, have not pursued further areas, ignoring other issues that could have been potential challenges.

Review the data collected from options used to overcome those challenges. People with a favorable opinion on management systems spend time and effort in techniques such as Researching on the web, Private training, MSME training, and Attending seminars/webinars. In contrast, people with a favorable opinion of management systems spend more time conversing with friends, which could have been a reason for their opinion as the information received would not be in professional support, and such individuals make less volunteering efforts.

Also, the training and participation played a significant role, where individuals with favorable opinions participated in the exercise. In contrast, individuals with a negative opinion have a mixed set of few participating and few not participating, which indicates that participation in training is essential for understanding the effective way to implement and sustain the management systems. Optimistic individuals have shown interest in weekly meetings, learning, and development for effective implementation. In contrast, hostile individuals have relied extensively only on consultants, which can be an essential factor for having management systems being unsuccessful in their implementation or sustenance.

The people who had an unfavorable opinion of management systems have more learnings in terms of Handling NC and Taking Corrective actions as a probable factor that, due to their less involvement, had to face closure of nonconformities than people who had

a favorable opinion of management systems having their learnings to share in terms of Evidence handling. Auditing Management System indicates their confidence level due to their preparation for meetings and training, allowing them to implement the management systems effectively.

5.7 Interview results

The in-person interviews revealed important insights regarding the impact of management system excellence in the Manufacturing and Service industries of the MSME sector in Bangalore. There were more than 7250 words of narration summed together across five questions that were asked to the 100 business leaders of MSME industries, and a closer look at such words was done; a keyword density was done using Text analyzer: Keyword Density + Word Count Tool online tool was used, and mapping was done based on the responses obtained for each question, key themes were identified using which data has been presented in this research.

5.7.1 The best way to address organizational challenges in management systems

What works best in the MSME industry to address organization challenges in management systems?

The weekly implementation review is not only a routine task. It helps the organization. Instead, it's a robust management system implementation and sustenance tool. Business leaders provided various insights such as Weekly reviews allowing teams to assess progress; weekly review aligns catch up with target dates; by reviewing weekly, teams can detect deviations and address the challenges early; through weekly reviews, adjustments can be made swiftly and minimize risks.

Few stakeholders also supported the fact that it enabled the teams to identify any lapses in implementation and address them promptly - one gave an example stating they had a wrong conception of customer feedback analysis. Because of weekly reviews, they could handle the mistakes the entire effort of implementation would have been wasted; such weekly updates keep business leaders informed on what is happening with implementation, which gives them confidence in speaking to customers who are concerned about the implementation of such systems and ensures everyone is aligned on the status of the progress and expectations.

Regular reviews boosted team morale and indicated how serious the management is about this implementation, enabling everyone to provide importance to the management systems implementation. Certain new members were inducted into an organization. Because of weekly reviews, they could catch up with the requirements and align them for implementation - this is one of the statements provided by a business leader. Weekly reviews ensure any project delivers its intended outcome (Infinity Planners, 2019). Weekly assessments confirmed a health check for progress.

Reviews are imminent, encourage accountability, and Team members stay committed to their tasks; such weekly reviews serve as a communication channel where Teams discuss challenges, share insights, and collaborate effectively on the implementation. Regular reviews contribute to accurate project documentation. Details are captured promptly. Fine-tuning to the management systems can be done based on weekly feedback, leading to better outcomes.

Training helps individuals and organizations overcome challenges effectively; it provides the new skills to handle tasks and improve their proficiency for better organizational performance and productivity. The training system developed their thinking and improved their problem-solving capabilities, making them self-equipped to address and solve challenges by taking preventive measures to prevent implementation problems. Training sessions improved teamwork and collaboration among team members, through which the management system requirements were understood equally by all, and trained staff felt more confident in handling challenges, creating a culture of continuous improvement. Business leaders also stated that training leads to higher retention rates, and well-trained teams give MSME organizations a better advantage in the market.

Confident business leaders favored hiring consultants who enabled access to specific knowledge and experience, which eased the decision-making process for management system implementation. It also said that timely implementation, a challenging factor, was reduced as the consultants quickly identified gaps and established remediation plans to address them. Meeting and fulfilling customer requirements is a crucial aspect of MSME organizations as most of them are in the business-to-business position of supply chain positioning, and consultants helped align with customer needs and expectations that the management system could address to the MSME organizations. Consultants also helped MSME organizations establish processes that can be benchmarked to operational best practices. Considering the above discussions, we can conclude that Weekly Implementation Review, Training, and Use of Consultants could be a few of the best ways to address organizational challenges for Management systems excellence.

5.7.2 Which management systems are working well to help MSME business?

ISO 9001 is a definite winner here; Management system standards (MSS) published by ISO are among the most recognized, accepted, used, and recognized documents we publish. They include standards such as quality management systems, occupational health safety management systems, information security management systems, environmental management systems, and energy management. There are more than 80 MSS (ISO, 2014). ISO 9001 is the best standard for small businesses (Tricker, 2016). ISO 9001 certification is a proven set used by organizations globally for more than three decades for organizational excellence. It is not just a quality management system but a proven set of requirements for a compelling business management system. As of 2022, an estimated 2.1 million ISO 9001-certified companies worldwide exist. This number includes companies in over 170 countries that show compliance with quality management (Anon, 2022). ISO standards help MSME businesses. ISO Standards help organizations of all sizes, natures, types, and sectors, including the MSME sector, to reduce costs, increase productivity, and access new markets (ISO, 2019). ISO 9001 assists companies in managing risks, improving worker safety, and reducing waste. ISO certification is also a great marketing tool, indicating a commitment to quality that potential customers want to see. Improved chance of winning contracts. It enables organizations to achieve Higher customer satisfaction, Reduced product or service problems, Better management, Increased consistency in business practices, Enhanced employee satisfaction and job security, Lower costs, and Streamlined business processes. ISO standards help MSME businesses. ISO Standards have been proven to support organizations of any size and sector, reduce costs, increase productivity, and access new markets (ISO, 2019). These discussions have established the opinion provided by business leaders that the Quality Management System / ISO 9001 is one of the best management system standards that suits MSME organizations.

5.7.3 Best ways to align the employees to adopt and adhere to management systems.

Training is one of the best ways to align the employees to adapt to adherence to management systems. Clause 7.2 of the ISO 9001 standards also states training and competence management. Training imparts the knowledge for doing the work and enables the improvement of the competence of individuals.

Training material, modules, etc, must be considered while designing training programs. The trainers can be internal, external, or even LMS Learning Management System (LMS), which can be used for self-paced learning, provided the training subject aligns with the intended outcome. Training offers organizations growth in their skill set of individuals, which in turn helps organizations to improve their practices.

Performance measurement provides efficiency and accountability to individuals and ensures that individual efforts align with organizational goals. Employees are aligned on corporate objectives. Performance metrics offer measurable data for decision-making - the principle of a quality management system - evidence-based decision-making is also fulfilled when performance measurement is used as a technique for employees to implement management systems effectively. Performance measurement provides visibility in process results, and actions can be taken effectively to manage the efficiency of the process and the productivity of individuals.

Incentives can discourage unethical practices, making individuals perform better to achieve targets and enhance productivity at work. For ages, organizations are using incentives to improve employee morale, which also assists in developing a sense of achievement and organizational loyalty. Due to incentives, satisfied workers perform better in an organization and their processes, so implementing the management system requires everyone's contribution; hence, identifying and allocating incentives helps an organization obtain the support of the implementation team. Incentives set the organization into a culture of continual improvement, one of the essential principles of a quality management system that enables sustenance in organizations.

Metrics make the individuals accountable for their responsibilities as results are visible to the stakeholders. When communicated with metrics, employees feel more responsible and engaged. 86% of the respondents think Training, performance measurement, and Incentives are essential in business to align the employees to adopt and adhere to management systems.

5.7.4 Which phase of a management system do you want to simplify in implementing and adhering to it?

Documentation, record management, and training contribute to 87% of the opinions from the business leaders that they want to focus on to ensure that easing these phases of a management system makes it easier to implement and adhere to.

Simplicity in workflows results in ease of understanding the nature of work, providing productivity. Since it's easy to understand, employees have reduced chances of making mistakes and errors, improving workplace morale.

A simple workflow provides clarity, and it's easy for employees to understand it; as one of the business leaders had quoted, their shop floor operator found it challenging to read a two-page instruction but found it comfortable to follow a 4-page visual process flowchart.

The step-by-step flow reduces confusion since complexity can be unproductive in the setup of MSME environment industries. Employees contribute to faster efficiency with simple workflows, minimizing the training time.

Employees encourage processes that are described straightforwardly, which helps them understand the requirements and improves their morale and job satisfaction. Pictorial workflows can be impressive, creating a visual workplace and overcoming language barriers in some instances.

The scalability of simple workflows is much higher, revision management is transparent, and where a loop of steps is involved for a decision-making outcome, its presentation is much more effective than descriptive narrations.

MSMEs have to focus on record management, good practices of record management can be adopted, and records to be stored to facilitate retrievability soon. Records indicate the transparency and compliance of a process in management system implementation. In Business processes, certain records can be related to legal requirements; managing such records is even more critical. Retained documented information should be accurate and legitimate without integrity issues. When such records are maintained electronically, then the Information can be efficiently retrieved by those with a legitimate

right of access for as long as the information to support audit decisions and conclusions needs to be held;

One of the critical points to be considered in electronic records is to ensure that information is kept secure from unauthorized and accidental alteration or erasure, that access and disclosure are adequately controlled, and audit trails track usage and modification. Recorded Information is to be held securely and remains accessible as per requirements for as long as it is required based on legal or customer requirements. Records must be legible to ensure this MSME can use cloud-based record management solutions through which any alteration can also be traced, and records can be access-controlled with better backup. Records must be stored in chronological order of date/customer/process to ease record management.

Consistent and documented retention and disposal procedures can be provided for the permanent preservation of archival material and secure disposal of information at the end of its life. Regular training for Staff should be provided to make them aware of their information handling and keeping responsibilities through learning or awareness programs and guidance.

To simplify the training, focus on easing the training process and make it simple. The short attention span of individuals, if it can be made engaging, helps deliver training effectively. Training can be encouraged to engage with a self-paced learning management system through which employees can take up training at ease of their choice and available time. The training programs that should be developed should be workshop-oriented with assignments and exercises rather than just classroom training, which can lead to less

employee interaction and engagement. Training programs should be designed with the target audience kept in mind. As stated by one of the business owners, a one-point lesson training was way more practical in communicating the message to their employees than detailed classroom training. Training programs should be considered in detailing the benefits to the participants. Training programs can be split into multiple sessions. During the discussions, MSME organizations' business leaders indicated that training programs are shorter, do not exceed an hour, and help relieve employees within the work period without affecting their work requirements.

It is suggested that when management systems are implemented, training can be structured over some time to a shorter duration and may cover each clause or section requirement one hour per session and followed with an implementation exercise or assignment which people can work on and present in the next session, such training shall be more effective easing in the implementation and sustenance of management system. Creating or designing the training plan has to be a combined effort between the business leaders and employees and led by the subject matter experts where available. Methods used can include:-

- 1. Self-paced learning through learning management systems; these are readily available, and most are online programs.
- 2. Mentoring is another method that pairs a potential leader with established organizational leaders.

To conclude, the research used 200 people for the survey and 100 for interviews.

The study's findings and the interviews provided exciting information on factors that

influence the MSME organization's management system excellence at implementation and sustenance. Results provided how effective implementation review, audits, training, and simplified workflows have on business workers for the implementation and sustenance of management systems in MSME. According to the poll findings, employees and business owners find it easy to adapt to management systems when provided with enough information about them. The research findings also revealed that ISO 9001, or Quality management system, is the most preferred management system in MSME industries. Implementing the management system might become problematic if no review support is provided and puts the organization in setback mode since this fosters opposition. Before beginning any management system implementation process, it is necessary to address training elements that must be considered. It was also observed that if no effective implementation reviews, audits, and training are provided, more individuals may have a negative mindset toward management system compliances.

CHAPTER VI:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

This effort was a detailed study to identify the impact of management system excellence - implementation & sustenance in MSME organizations for the MSME manufacturing and service sectors. The findings from existing research on all areas of management system excellence - implementation & sustenance and its impact were reviewed and considered as input for drafting this thesis.

Research suggests that the impact of management system excellence - implementation & sustenance is on people, processes, customers, cost, and revenue. The problem affects not only one area/process/department/function; the consequences are far and wide in the organization's operations. Similarly, the positive impact of good management system excellence - implementation & sustenance also stretches far and wide. While management system excellence - many researchers widely discuss implementation & sustenance, authors, the value and importance of acting on the need to create suitable methods for management system implementation & sustenance is limited.

An extensive review of existing literature was carried out. In most cases, the problems identified related to the management system and the idea to address it are provided by another author or researched. This study identifies different challenges MSMEs face in management system implementation and operation and defines the solution to address these challenges.

The solutions defined as a result of this research are derived from a combination of bringing together some of the findings from the vast existing research that is already available, followed by this researcher's own professional experience of more than 14 years; the extensive surveys aided the solutions and feedback by industry business leaders who have hands-on experience in their fields such as business leaders from the MSME Business, favorable implementors, leaders who were not good. Several journals, articles, and books on management system authors were considered in this research.

The solution outline is detailed and covers all aspects of implementation and sustenance for management system excellence.

There are research results, opinions from business leaders who have practiced these management systems successfully in their organization, and personal narratives all together forming an integrated proposal towards solving the research problem and preventive steps that organizations can adopt for success in their implementation and sustenance for management system excellence.

Poor management system excellence - implementation & operation impact an organization directly, and then the cascading effect of this failure derails the organization's progress. Loss of business was evident, and attrition of persons is prominent in specific cases; however, the total impact is not practically measurable. Interestingly, as evidenced in the literature review, issues and concerns for MSME, such as poor quality and loss of business, are also attributed to poor management system excellence - implementation & operation practices. These terms do not intend the management system excellence - implementation & operation related concerns, but effective management system excellence

- implementation & operation could have prevented these issues from occurring. In comparison, poor management systems, reviews, training, role clarity, and employee morale cause the ineffectiveness of management system excellence - implementation & operation. The research into these areas proves that these failure points were due to poor management system excellence - implementation & operation. An outcome of the survey of stakeholders and industry business leaders was their insights and solutions to existing problems. Results from the surveys were analyzed to identify the solutions. The solutions comprise material from pre-existing publications and articles and information in identifying the challenges and related solutions. In this research, a lot of data and narration from industry business leaders were analyzed to summarize the results found in the solution. Detailed text analytics of feedback and narration from the industry business leaders were considered as inputs to arrive at critical challenges, opportunities, and actions taken to address those challenges and recommend actions; these are found in the results section and the solutions.

This researcher has more than 14 years of experience in management system excellence - implementation & operation roles at various levels, so experience addressing these concerns that was first-hand experience of the researcher also contributed to the solutions.

The solution, therefore, is a combination of all of the above methods and methodology.

6.2 Implications

Solution for poor management system excellence - implementation & operation is not about focusing on individuals who contributed to its failure but should focus on the methods that led to the unsuccessful implementation and face challenges in management system excellence. Poor management system excellence - implementation & operation indicates a more significant concern in an organization. Therefore, the possible causes have to be evaluated and addressed. The cause has to be addressed. Otherwise, the challenges will continue for MSME, causing complex management system implementation issues. Causes could be related to the behavior of persons, complacency, lack of commitment, and disparity of thoughts. Still, in those cases, the management systems should be established in a manner to recognize these and address them or establish necessary prerequisites for such persons before actually reaching a position of management system excellence - implementation & operation to ensure such individuals do not break the synergy in an organization and cause weakness of its management system excellence.

Poor management system excellence - implementation & operation and unfavorable employees to implement this system happen due to various factors, some combined, or few due to individual factors as evidenced in this research. The main objective is to identify and address challenges in management system excellence - implementation & operation; all employees should cooperate with the business leader, or else the leader will be constantly firefighting to fix these challenges, which prevent effective management system excellence. Selecting poor management system performance is only an interim action with its fixing costs attached; consequences might have already affected the business in the form of financial or business risk. Poor management system

excellence - implementation & operation have to be avoided. Being proactive is essential, as a reactive approach may be costly to the MSME industries in the present business scenario. In conclusion, this research provides information to provide inputs to MSME organizations for management system excellence in their organizational transformation. Manufacturing and Service industries of the MSME Sector in Bangalore must prioritize weekly implementation reviews and visual workflows, enhance their records management, establish measurable performance indicators, and invest in focused and short training and development programs for their employees to ensure effective management system excellence - implementation & operation within the organization because effective management system excellence plays a critical role in ensuring the success of MSME Businesses.

6.3 Recommendations for Future Research

This study focused on all areas of management system excellence - implementation & operation and its impact on manufacturing and services industries in the MSME sector in Bangalore. This research was localized, with respondents covering Bangalore for manufacturing and services industries MSME. Therefore, the results and outcomes are not global. The surveys and results were all focused on business leaders as individuals handling employee sizes between 25 and 50 employees in the companies. The research also examined organizational practices to enable better management system excellence - implementation & operation.

This research has not focused on industries out of Bangalore, business leaders handling the size of the organizations with more than 50 employees. Future research can

focus on studying non-MSME industries, MSME industries out of Bangalore, the educational sector, hospitals, hotels, resorts, etc.

Future researchers, if they want to publish the results of this study in articles and books, shall be made available to such researchers or research organizations. The research results will be shared with MSME industries.

6.4 Conclusion

This work is an honest effort to address the challenges faced by MSME organizations for their management system excellence - implementation & operation and to help provide actionable insights and plan of action to help organizations overcome the challenge and threat posed by poor management system excellence - implementation & operation.

The way forward for all concerned as an outcome of this research is to utilize the findings from the study, tap into the solutions, and incorporate them into the operational mechanism. Each organization shall face a unique challenge; some organizations may use entire solutions, and some organizations may need only certain parts of the solutions.

During organizational efforts to implement management systems, weekly solid reviews, training, and performance management are necessary since they help ensure that all relevant parties are informed and actively engaged. The management of MSME industries has to fully grasp the importance of weekly reviews, training, performance management, and their part in the organization's overall development before they can go forward. Before beginning the process of implementing management systems, business leaders have to ensure enough pre-training for the implementation team; business leaders

provide time for weekly reviews, training, and performance management with employees to prepare them for effective implementation. While implementing management systems, management has access to various tactics that may assist in reducing potential conflicts. Including employees in the decision-making process, communicating with employees in a way that is clear and consistent, providing employees with assistance and training, and recognizing employee contributions are some of the tactics included in this category. The ability to review and discuss with the implementation teams clearly and effectively weekly is one of the most critical aspects of these techniques, as it contributes to creating an environment in which employees feel appreciated and heard.

Leaders have stepped up to facilitate effective weekly reviews, training, and performance management throughout the transformation process in their organizations. These talents include active listening, empathy, and transparency. Weekly reviews, training, performance management, feedback, and cooperation may be established by leaders equipped with the competencies mentioned earlier. This culture has the potential to assist in lessening employee resistance to change while simultaneously increasing employee buy-in and engagement.

Organizations can hire expert consultants and expect them to implement management systems effectively, but that doesn't work without solving the employee participation in these activities. There has to be persistence and perseverance from business leaders, organization managers, and the organization's employees; there are no shortcuts.

The business leaders of an organization have the responsibility of ensuring that:a) suitable, committed persons are included in implementation teams

- b) adequate management system excellence implementation & operation training is available
 - c) insist on simple easy to understand visual workflows
 - d) regular focused short workshop-based training
- e) Establish performance indicators and incentives that enable employees to effectively implement and sustain management systems.

This research has provided guidelines and a framework for these aspects. They are implementing these actions above, which will be helpful for management systems to be effectively implemented in the manufacturing and service industries of the MSME sector in Bangalore for their management system excellence.

APPENDIX A

SURVEY COVER LETTER

Greetings.....

I appreciate YOU for showing interest in participating in my research topic, Management System Excellence In Manufacturing And Service Industries MSME (Micro Small And Medium Sized Enterprises) Sector In Bangalore that I am conducting as a Part of My Doctor Of Business Administration Program in Swiss School of Business And Management Geneva. Thank you for sparing the time and extending your willingness to support and help with this research.

As discussed over the telephone, I am attaching a Google link: https://forms.gle/4hFZuGy6DGc52Qfg7, which has a set of interview questions for your response. All questions are to be responded to to ensure effective research is conducted, and your reply will be highly valued as a part of this program. Feel free to ask any questions related to the same. Kindly reply within a week.

After your submission, I would also like to schedule a video call for your interview on the questions below. This meeting will take around 30 minutes and will be scheduled per mutual availability. Confidentiality shall be ensured on the collected information and used only for my research.

I thank you for your sparing your valuable time for this research study.

APPENDIX B

INFORMED CONSENT

Confidentiality and privacy of information are briefed to me.

I agree with my participation in interviews for this research. I agree to submit my responses to the primary questions via email. I also willingly agree to participate in the interview session for the secondary questions, which will be via Google Meet.

The interview results will be kept completely anonymous, and the results from this analysis, study, and research may be published in any form that may serve its best.

I also consent that information obtained from this research is used in a way that is thought to be effective for this study.

APPENDIX C

INTERVIEW GUIDE

Respondents identified will be contacted through telephone or email to discuss their interest in participating in the research on management system excellence in the manufacturing and service industries' MSME (micro, small, and medium-sized enterprises) sector in Bangalore.

During the initial telephonic conversation, the objectives, process, and confidentiality aspects will be briefed to the respondents. As a researcher, I will explain their roles in the research to each respondent and why they have been selected for this research.

The time duration for such interviews and response systems expected in the interview. After receiving their confirmation, I will inform them about the survey questionnaire and the interview process.

Google form-based survey questions will be sent to participants, who will be given seven days to respond; in case of nonresponsiveness, I will reach out for clarifications. It may take approximately 30 minutes for participants to respond to the survey questions.

The semi-structured and narrative interview questions require a Google Meet video conference conversation. The approximate time for this meeting is 30 to 45 minutes. The Google Meet video conference schedule will be set up at mutual convenience.

During the conversation, all narratives for every question by respondents will be recorded by writing down the meeting minutes. Respondents will be informed, and consent will be taken to record their statements.

Respondents will be thanked for their participation

Research Questions for Business Leaders:
Name of the Participant:
Role:
Nature of business: Manufacturing / Service
Title:
Organization:
No. of employees:
Total work Experience
Management system standards implemented.
1. Which of these below options defines a successful management system?
Clearing Customer Audits
Recognition of reliable supplier of deliverables (product/service)
Growth in business
Eligible for various requests for proposals/tenders
Effective results in process efficiencies
System dependence rather than people dependence
2. Which of these options led to an effective management system implementation?
Teamwork
Use of Consultant
Weekly Implementation Review
Training
Past Experiences
3. Which options do you follow to ensure the organization's management system
can be sustained?
Quarterly Internal Audits

Monthly Management Review on the performance of the management system
Training
Certification Audits / Fear of losing certification
4. Which of these options enables you to decide which other management systems
are helpful to your business?
Competitor / Industry benchmarks
Customer requirements
Past Experience
MSME Notifications
5. Which of these options for challenges in your industry are addressed with the
assistance of management systems?
Clarity in Responsibility and Authority
Improvement in productivity
Clearing Customer Audits
Eligible for various requests for proposals/tenders
Research Questions for Managers and Employees
Are you favorable that effective implementation of management systems is possible in
MSME organizations?

Research Questions for Managers and Employees
Are you favorable that effective implementation of management systems is possible in
MSME organizations?
Name of the Participant:
Role:
Nature of business: Manufacturing / Service
Title:
Organization:
No. of employees:
Total work Experience
Management system standards implemented.

1. Which of these below are the challenges you faced while implementing the
management system?
Lack of Guidance / Management review support
Lack of supporting information to learn
Time Constraint
Team Cooperation
2. Which of the below options were used to overcome those challenges?
Researching on web
Having conversations with friends
Private training
MSME organized training
Attending seminars/webinars
3. Were there any trainings you attended during implementation / to sustain the
management system?
Yes
No
4. Which of the options below helped you establish an effective management system?
Weekly Review Meetings
Learning and development
Consultancy
Researching
5. Which learnings as a management system implementor do you want to share with
5. Which learnings as a management system implementor do you want to share with others?
others?
others? Evidence Handling and Auditing Management System

Follow-up and secondary set of interview questions for video conference interview with
all participants, to be answered in less than 15 words.
Research Questions for Business Leaders:
Name of the Participant:
Role:
Nature of business: Manufacturing / Service
Title:
Organization:
No. of employees:
Total work Experience
Management system standards implemented.
1. Management systems and what works best to address organizational challenges
2. Which management systems are working well to help MSME businesses?
3. Best ways to align the employees to adopt and adhere to management systems.
4. Which phase of a management system you want to simplify in implementing and
adhering to it
5. Solution Framework to help management system execution.

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