

“It’s said that a wise person learns from his mistakes. A wiser one learns from others’ mistakes. But the wisest person of all learns from others’ successes.”

Your Host...



Isabelle Jenkins
French native

58 y.o.

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Competencies

- ❖ Project management from call for tender to closure.
- ❖ Agile, Prince2 and LBIP+ project management methodologies.
- ❖ Call for Tenders & contract negotiations (technical & commercial).
- ❖ SME on ISO 9001, ISO 9100 & 9110, ISO 19443, ISO 14001, ISO 45000; as well as Export Control Regulations (US & Wassenaar).
- ❖ Quality management (LAI - FAI - assy reviews - assy & inst. times).
- ❖ Teams' mgmt from recruitment to lay off (>30 pax BC & WC).
- ❖ Subcontractors management.
- ❖ Change Management (mergers & acquisitions/restructurations, team transitions, project management methodology transition)
- ❖ Lean management.
- ❖ Training creation (digital & presental for both BC & WC).

Professional Path since 2004

- ❖ Project manager business partner @Eocen FR.
- ❖ Consultant project manager @Airbus France.
- ❖ Project Leader on Typhoon program @BAe Systems & British MoD.
- ❖ Project manager business partner on A380 Prog closure @AAA FR.
- ❖ Project Leader for Prod line transfer US to FR @Safran FR
- ❖ Change manager @MI-GSO UK.
- ❖ Project Leader on Hawk T1 Program @BAe Systems & British MoD.
- ❖ Senior commercial manager @APPH Ltd UK.
- ❖ Project Management Officer @Airbus UK.
- ❖ Commercial manager @Hawker Beechcraft UK.
- ❖ PMO on RR FTB Trent 900 certification @Airbus UK.

Training & Developments

- 2023 -24 : Quality Safety & Environment personal development (ISE)
- 2018 : Facilitation & NLP APMG Int'l certifications
- 2017 : Lean 6σ Green belt
- 2015 : Change Management APMG Int'l certification (renewed in 22)
- 2013 : Agile Project Management APMG Int'l certification

Interests

- Eocen Agile Community of Practice core member.
- Scuba diving (SSI level 1 certification).
- Nordic walking.
- Member of a group helping homeless youngsters to come off the streets.
- Readings on geopolitics, social economy, History (medieval and post WWII)

Today's Topic

*Elevating Project Success:
Navigating Quality Norms
and Standards
in Project Management.*

Agenda

- ❑ Introduction
- ❑ Quality Requirements : their definition
- ❑ Quality Requirements : their benefits
- ❑ Standards & Norms : their definition
- ❑ Organisations & Regulatory bodies
- ❑ Focus on ISO & ISO9001 (2 slides)
- ❑ Focus on QMS
- ❑ Focus on QMS Tiers
- ❑ ISO 9001 Clauses - Maintaining the QMS
- ❑ Focus on Lean Management
- ❑ What about Lean Thinking ?
- ❑ What about Project Management ?
- ❑ What about Project Management Approaches & Tools ?
- ❑ Quality in Project Management
- ❑ ISO 9001, Industrial Standards & Lean = High Quality Project Management
- ❑ The common approach to Norms & Standards & Project Management
- ❑ PDCA & DMAIC application in PM
- ❑ In summary
- ❑ Acquire & Deepen your Knowledge !

Q&A Time

Introduction

Implementing Quality Standards whichever is the project management framework is crucial for delivering high-quality, no matter if it is a product, a software or a service.

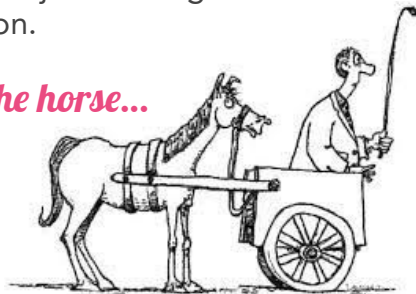
Several strategies can be employed to achieve this. The main guidelines to these strategies are simple :

1. Do not reinvent the wheel !
2. Apply the relevant tools, very often Lean, as and when required.
3. Communicate accordingly and relevantly.

During this awareness, you will grasp the fact that Project Management + Standards & Norms + Lean Thinking & Tools are not decorrelated items but, in fact, all part of the same ecosystem deeply tangled into each other.

No matter if you work under Waterfall, Agile or some own's companies approach like LBIP+ at an aircraft manufacturer, hybrid of the previous named, Standards & Norms are the Lean outcomes of project management experiences over decades. Standards & Norms enable collaboration between different entities locally and globally. From 1901 with the creation of BSI (British Standards Institute), ISO in 1947 to Toyota's Lean approach in the 1970's, the ecosystem matured and keeps evolving to enable every project manager to deliver Quality products or services as per stakeholders and Customers' requirements and satisfaction.

But let's not put the cart before the horse...



... Back to basics !

Quality Requirements : their definition

Quality requirements in a project refer to the standards, criteria, and specifications that a project must meet (or exceed) in order to be considered successful.

The key points about quality requirements are:

- ❑ The expectations of the customer beneficiary of the project outcome(s), the stakeholders, and the project team regarding the quality of the project deliverables and processes.
- ❑ The Quality criteria documenting the internal processes and product attributes to be monitored.
- ❑ The Quality factors documenting the perceived aspects from the customer's perspective.
- ❑ The Quality metrics providing the indicators used to measure quality achieved.

Common types of Quality requirements include functional requirements, performance requirements, reliability and availability requirements, usability requirements, security requirements, and scalability requirements.

Well-defined Quality requirements are crucial for successful project planning, execution, and evaluation. They provide clarity of purpose, scope definition, resource allocation, risk identification, Quality Assurance, and performance measurement.

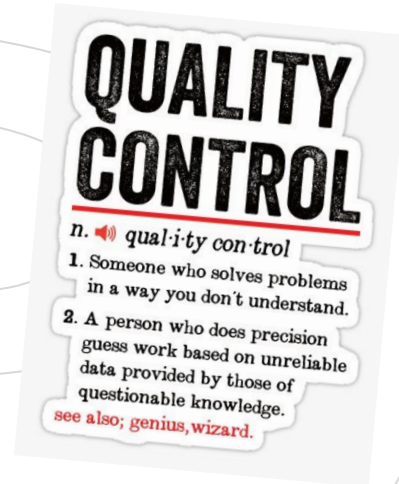
Stakeholders play a key role in determining the Quality requirements by identifying their expectations and needs. Effective communication and involvement of stakeholders is critical.

Quality requirements should be **SMART** - **S**pecific, **M**easurable, **A**greed upon, **R**ealistic, and **T**ime-bound. This ensures they are clear, objective, and achievable !

Quality Requirements : their benefits

Implementing Quality Standards in project management offers several benefits, including:

1. **Transparency & Trust** : Quality and its reporting provide visibility into the project's progress, fostering trust among team members and stakeholders.
2. **Continuous Improvement** : Quality implementation offers valuable insights, enabling teams to identify areas for improvement and take corrective actions, thus facilitating continuous improvement.
3. **Early Issue Detection** : Regular Quality checks help in identifying and addressing Quality issues early in the project lifecycle, reducing the risk of critical defects affecting project delivery.
4. **Informed Decision-Making** : Quality follow-up provides stakeholders with accurate and up-to-date information, enabling them to make informed decisions quickly, leading to more efficient resource allocation and improved project outcomes.
5. **Reduced Project Risk** : By reducing the risk of delivering irrelevant outcomes and responding to changing requirements or opportunities effectively.
6. **Customer Satisfaction** : By ensuring that each work item meets the right Quality standards, thus at every step of the workflow, project teams can meet client expectations, satisfying their needs with higher success.



Standards & Norms : their definition

Standards

- ❖ Formal, technical requirements or specifications that must be met, often developed by standards organizations or regulatory bodies.
- ❖ Provide precise, measurable criteria for products, processes, and practices.
- ❖ Can be voluntary or made mandatory through contracts, regulations, or laws.
- ❖ Examples include technical specifications, test methods, operating procedures, and measurement units.

Norms

- ★ General principles or guidelines that define acceptable behavior or practices within a particular context or community.
- ★ Based on social or cultural expectations, and can vary across different groups or societies.
- ★ Provide more general guidance, rather than specific technical requirements.
- ★ Examples include social etiquette, professional ethics, and organizational policies.

In summary, standards are more formal, technical, and specific, while norms are more informal, general, and socially/culturally defined.

Standards are often developed through formal processes, while Norms emerge organically within groups.

Organisations & Regulatory Bodies



Founded in 1906



Founded in 1961



Founded in 2007



INSTITUTE FOR ELECTRICAL
AND ELECTRONICS ENGINEERS

Founded in 1963



Founded in 1973



Founded in 1901



International Commission on Illumination
Commission Internationale de l'Éclairage
Internationale Beleuchtungskommission

Founded in 1913



Founded in 1865



Founded in 1988



Founded in 1926



Founded in 1918



Founded in 1986



Founded in 1917



Founded in 1947

Focus on ISO

ISO Standards are internationally agreed-upon guidelines that describe the best way of doing something, covering a wide range of activities such as product manufacturing, process management, service delivery, and material supply.

They are developed by the International Organisation for Standardisation (ISO), an independent body composed of a network of experts from various fields.

ISO standards are essentially internationally recognised ways of doing something, ensuring that everyone follows the same set of guidelines, resulting in a safer, more consistent end result. Some popular ISO standards include:

- ISO 9001 for quality management systems,
- ISO 27001 for information security,
- ISO 14001 for environmental management systems.

There are currently 24106 different ISO standards, each serving specific purposes and industries. Aerospace Standards are ISO9100 for POA activities and ISO 9110 for MRO related ones. Some of them are binding (you have to implement them to get your certification; others are for guidance only).

These standards benefit organisations by providing tried and tested methods for best practices, offering universally recognised certifications, simplifying regulatory requirements, and demonstrating trustworthiness to customers.

Focus on ISO9001

ISO 9001 is the globally recognised standard for **Quality Management** that specifies requirements for a Quality Management System (QMS).

The standard has 10 sections or clauses, with the first three being introductory and the remaining 7 dealing with the QMS which are crucial for company certification. They are:



1. Context of the Organisation,
2. Leadership,
3. Planning,
4. Support,
5. Operation,
6. Performance Evaluation,
7. Improvement.

ISO 9001 not only helps organisations to manage their **Quality Management System**. Its benefits include increased Customer trust and satisfaction, sound Quality control processes, cost savings and productivity gains, as well as promoting a culture of continuous improvement. Gaining the ISO 9001 certification, contribute to business reliability, professionalism, maturity and therefore, continuity and growth.

Be aware : ISO 9001 :2015 is under revision with an implementation for the end of 2025. This revision will integrate some industrial standards, not limited to ISO 9100 :2023, ISO 22163 :2023 (railways) and IATF 16949 :2016 (automotive). This revision will see the reinforcement of the “define, align, implement, monitor and conduct” that we all know as PDCA as well as a strong focus on R&O in the Plan phase.

Focus on QMS - Quality Management System

The Quality Management System (QMS) is an Organisation formalised system that documents processes, procedures, and responsibilities for achieving quality policies and objectives.

The QMS is designed to be influenced by the Organisation's objectives, needs, and the products and services provided, and it is largely based on the Plan-Do-Check-Act (PDCA) cycle, allowing continuous improvement.

The basic elements of a QMS include:

- ❑ The organisation's Quality policy and objectives,
- ❑ The Quality manual, procedures, instructions, and records,
- ❑ The data management, internal processes,
- ❑ Customer satisfaction from product Quality.

Implementing a QMS can benefit an Organisation by meeting customers' needs and organisation requirements, while ensuring compliance with regulations, and creating room for expansion, growth, and profit.

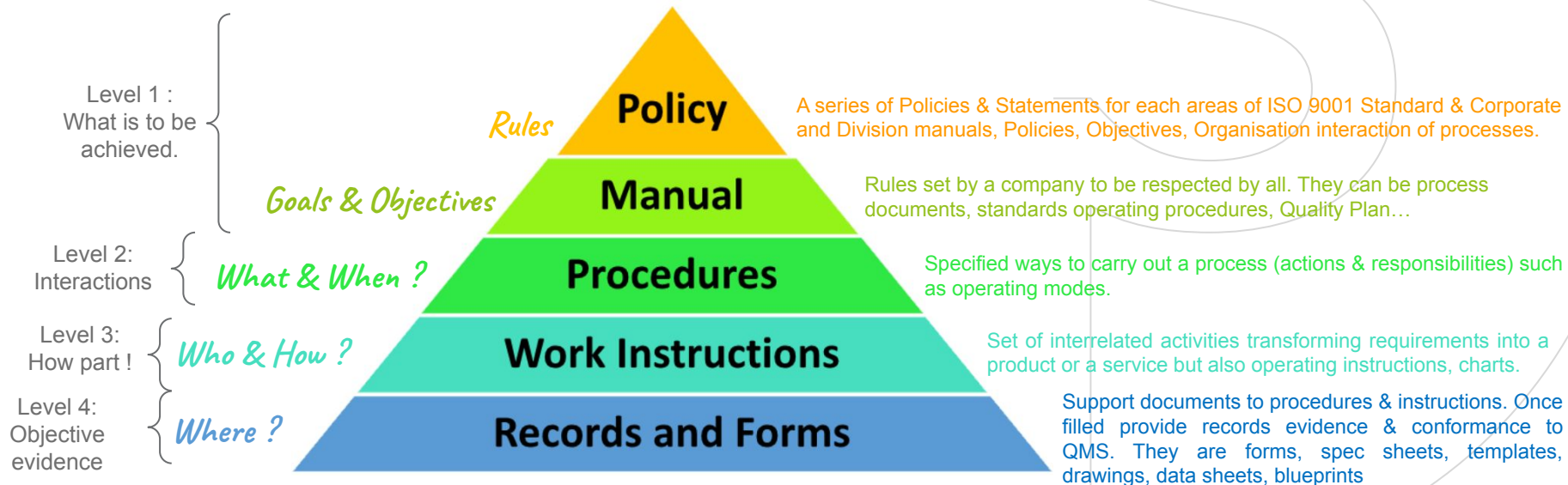
It helps coordinate and direct an Organisation's activities to meet customers and regulatory requirements and improve its performance.



Focus on QMS - Quality Management System Tiers

As a matter of rule, a QMS follows a 5 tiers/levels architecture. Pending on its activity, geolocation, politico-societal background, the QMS architecture may have more levels. Nonetheless, as ISO and other Regulatory Bodies have the same approach, collaboration between Organisations are not as such impacted.

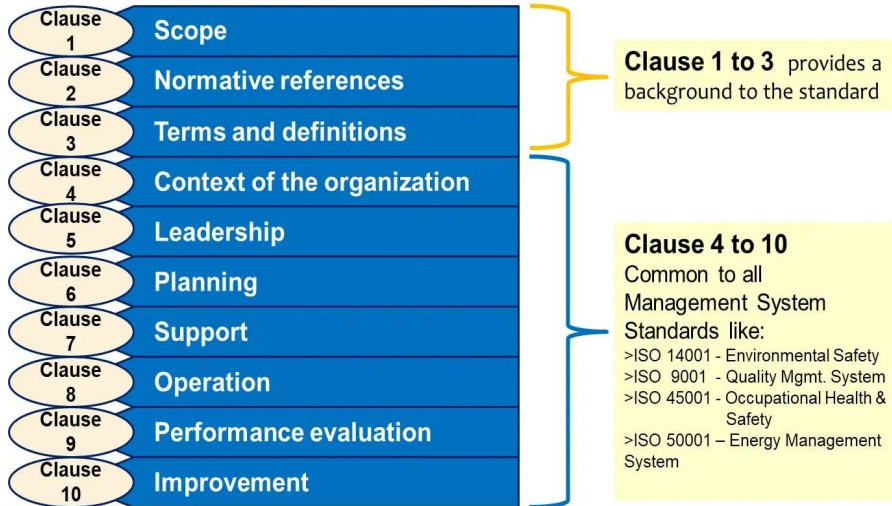
Nonetheless as project manager, you must ensure of your awareness of your external business partners own QMS requirements in order to close risks, potentially legal (i.e. anti-corruption Laws).



ISO 9001 Clauses - Maintaining the QMS

ISO Standards are always linked together. Their similarities ease their revision and up-dating. Therefore, and as an example the ISO 9001 clauses will be similar to an industrial standard such as ISO 9100 (Aerospace POA) or ISO 22163 (Railways) or even ISO 14001 (Environmental performance).

Each revision is expressed by the Norm reference followed by :2015 or :2023 (the revision year). This enables you to know that you follow the latest version published.



When to update your Organisation QMS?

1. When there are **changes to standards, regulations, or industry best practices** :The QMS should be updated to align with the latest revisions of relevant standards like ISO 9001.
2. When there are **process improvements or changes within the organisation** : If new processes are implemented or existing ones are modified, the QMS documentation should be updated accordingly.
3. When personnel changes occur : If **key roles or responsibilities change due to employee turnover**, the QMS may need to be updated to reflect the new job titles and assignments.
4. When **customer or stakeholder requirements change** : Updates to customer specifications, supplier agreements, or other stakeholder needs should be incorporated into the QMS.
5. When risks or opportunities are identified:The QMS should be updated **to address any new risks** that are identified, or to leverage new opportunities for improvement.

Focus on Lean Management

Lean management is a method of managing and organising work to improve a company's performance, inspired by Toyota's production system back to the 70's.

It focuses on continuous improvement, eliminating waste, and creating value for the customer.

The 5 Core Principles of Lean Management are :

- ❑ Identifying value,
- ❑ Mapping stream value,
- ❑ Creating flow,
- ❑ Establishing pull,
- ❑ Pursuing perfection.



The benefits of Lean Management include improved productivity, efficiency, Quality, and customer satisfaction. It is widely used across various industries and can be a valuable investment for organisations.

Lean management is based on the concept of delivering value and optimising workflows, and it is built on a culture of continuous improvement, enabling organisations to adapt to changing market conditions and stay competitive over the long term. Furthermore, Lean has several tools that we can apply to operations & projects. These techniques enable us to map out the value stream, identify & remove waste, produce value to the Customer, and lead organisational change.

Needless to say it also contributes to maintaining (when not improving) the QMS.

What about Lean Thinking ?

Implementing Lean Thinking involves embracing a business philosophy focused on creating value for Customers and eliminating waste.

Lean thinking revolves around the 8 Ps :



To implement Lean Thinking in project management, it is important to understand the foundation principles and how to integrate them within your organisation.

This involves :

- Setting explicit objectives,
- Cultivating a lean mindset,
- Starting with small steps.

It also requires leading the change, not just managing it, and ensuring that the human factor is addressed by explaining the benefits of Lean to the Team and helping them understand why each principle is important.

It is a mindset that focuses on continuous improvement and respect for people. To implement and support a Lean culture, the Lean Agent will use different tools. Those can be used independently or combined with each other in order to achieve the desired results/objectives.

Lean Thinking & Agile project management is the PERFECT combo !


What about Project Management ?

Project management is a structured approach to planning, organising, and controlling tasks to successfully deliver a unique product, service, or result within time, cost, and quality constraints.

It also is the process of leading a team to achieve all project goals within the defined constraints.

It is a critical discipline for achieving project objectives and driving organisational change, no matter which methodologies and associated tools or approaches.

Agile	Prince 2	CCPM	Waterfall
<p>Agile project management methodology provides flexible, iterative design and build process.</p>	<p>Structured and controlled approach with defined stages</p>	<p>Critical Chain Project Management provides a methodology* designed to control critical resources and prioritise dependencies within a project.</p> <p><small>*Dr Eliyahu M. Goldratt</small></p>	<p>Waterfall provides a simple framework for planning projects. Tasks are in sequential order. The team completes one task or step then performs the next step</p>

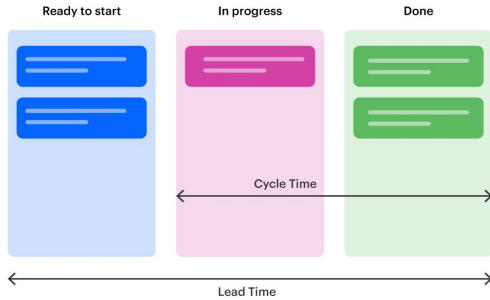


What about Project Management Approaches & Tools ?

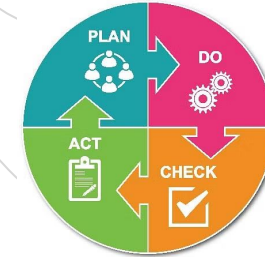
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<h2>Kanban</h2>	<h2>Lean</h2>	<h2>Six Sigma</h2>
<p>Tasks are represented visually on a board, allowing team members to see the state of every piece of work at any time.</p>	<p>Lean is a problem-solving tool for eliminating wastes and removing wasteful activities that don't add value to the process.</p>	<p>Six Sigma is a method that provides organizations tools to improve the capability of their business processes.</p>



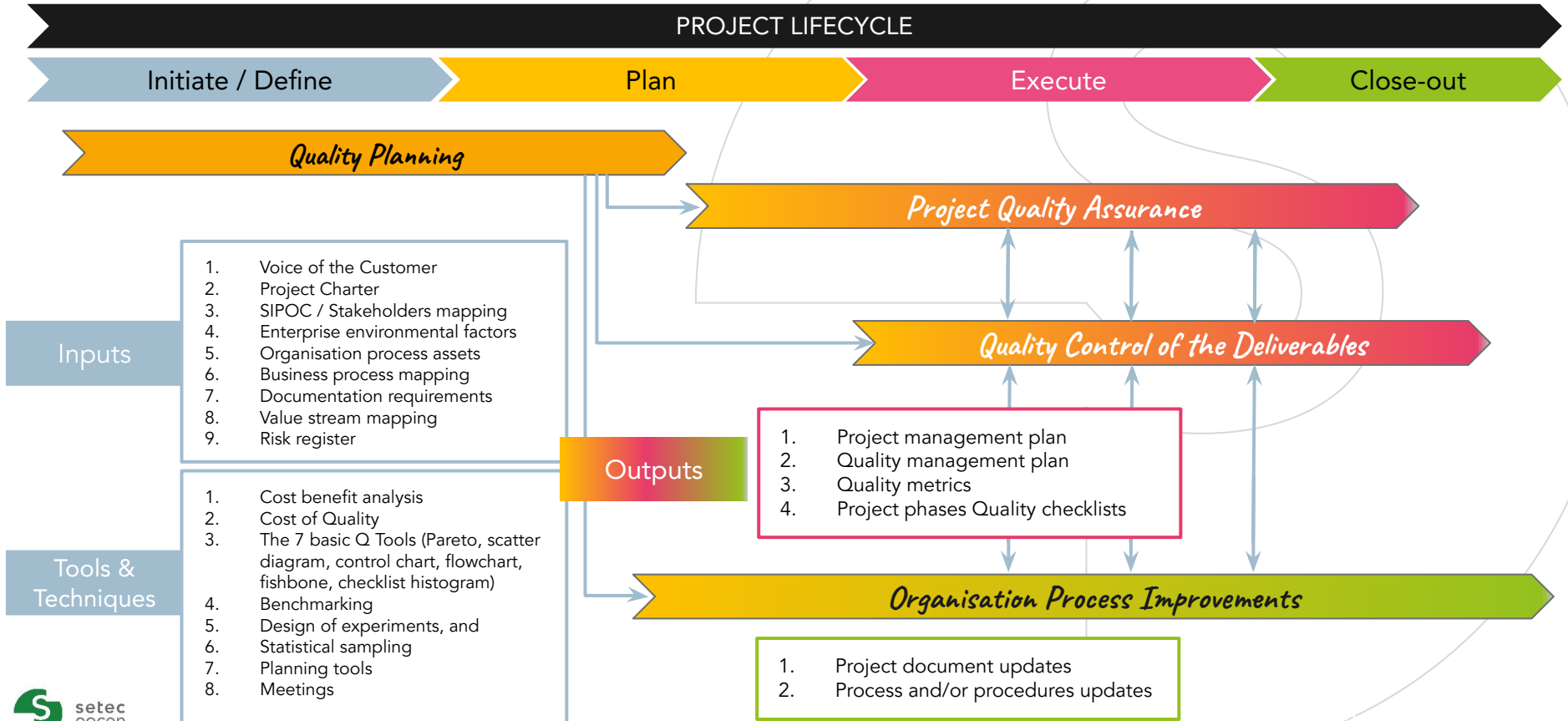
Planisware



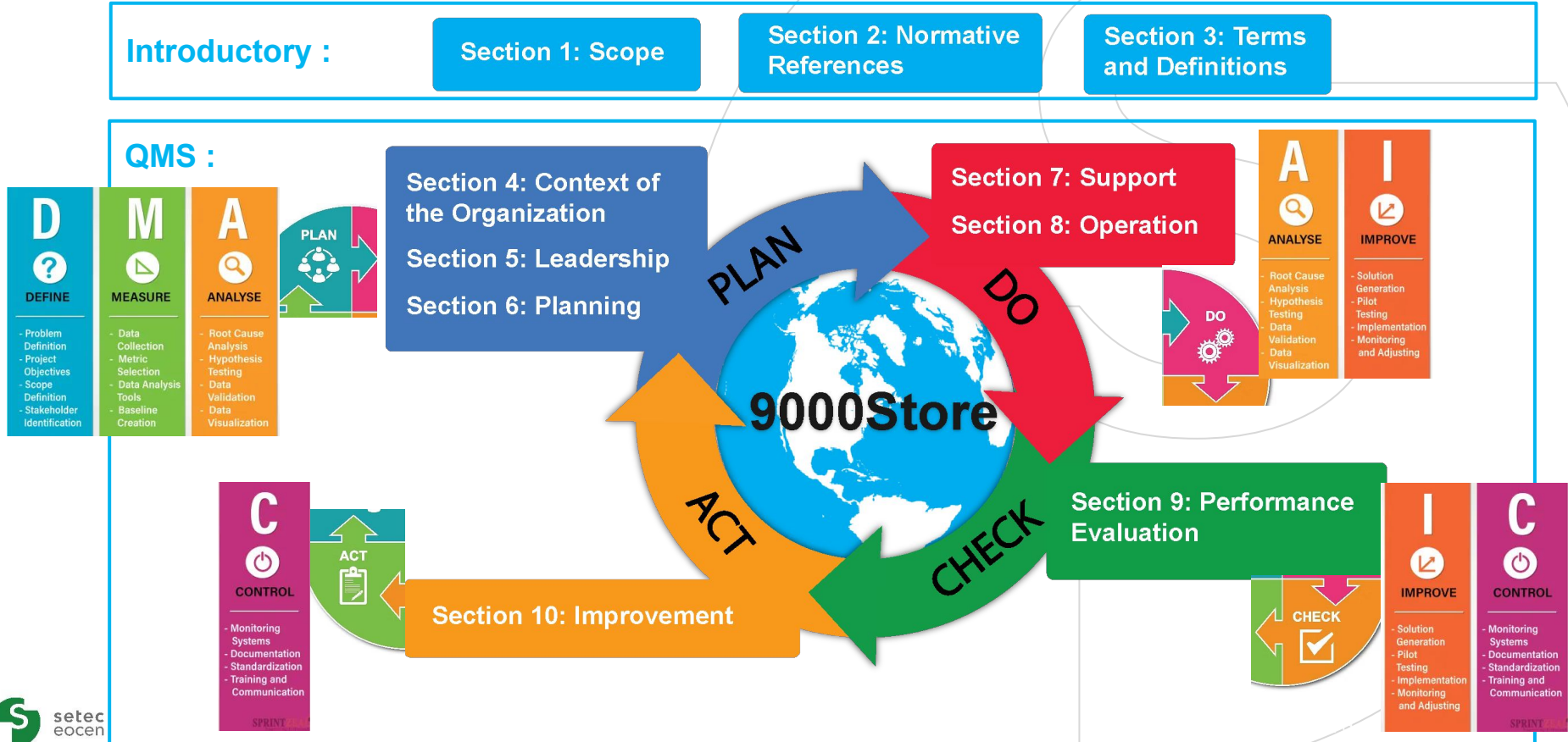
D DEFINE	M MEASURE	A ANALYSE	I IMPROVE	C CONTROL
<ul style="list-style-type: none"> - Problem Definition - Project Objectives - Scope Definition - Stakeholder Identification 	<ul style="list-style-type: none"> - Data Collection - Metric Selection - Data Analysis - Tools - Baseline Creation 	<ul style="list-style-type: none"> - Root Cause Analysis - Hypothesis Testing - Data Validation - Data Visualization 	<ul style="list-style-type: none"> - Solution Generation - Pilot Testing - Implementation - Monitoring and Adjusting 	<ul style="list-style-type: none"> - Monitoring Systems - Documentation - Standardization - Training and Communication



Quality in Project Management



ISO 9001, Industrial Standards & Lean = High Quality PM

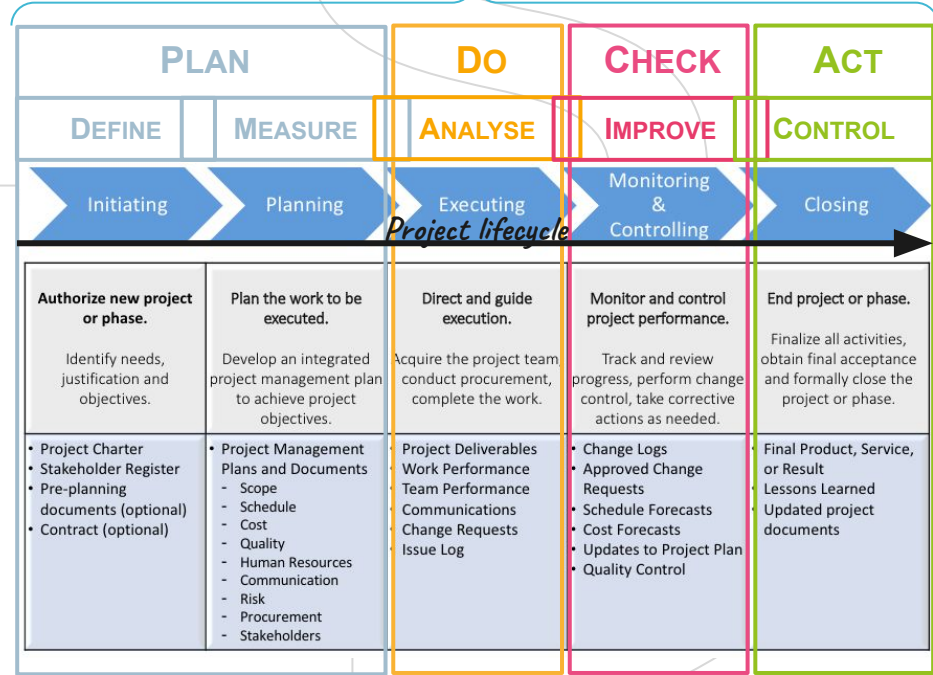
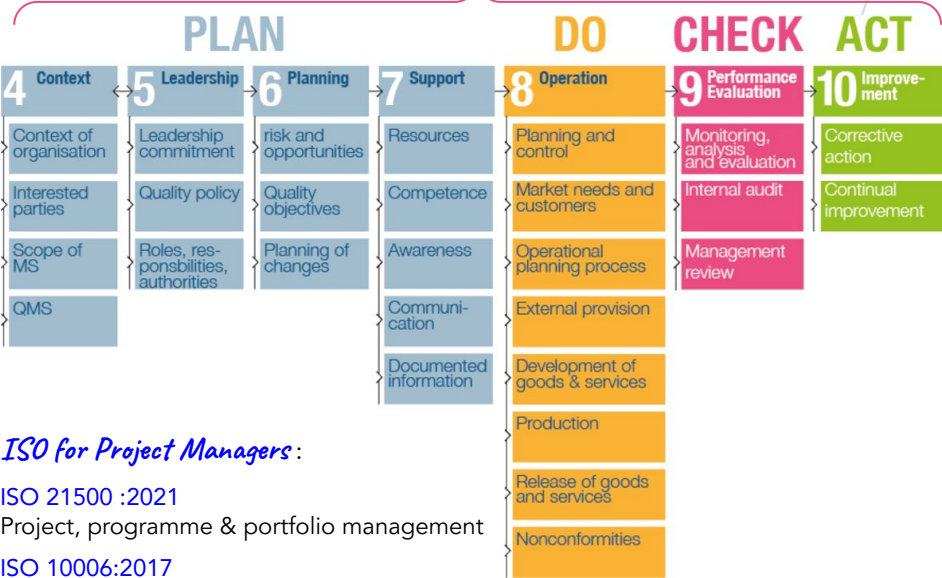


The common approach to Norms & Standard & PM

Looking at the belows, we can clearly notice the similarities in the approaches. It seems obvious that to ensure coherence and consistency, project management guidelines root themselves from Norms & Standards and vice versa, ensuring so the Quality of the deliverables and the overall project successful outcomes.

ISO

LEAN



ISO for Project Managers :

ISO 21500 :2021

Project, programme & portfolio management

ISO 10006:2017

Quality management : Guidelines for quality management in projects (reviewed & confirmed in 2023. Therefore, 2017 version remains current).



PDCA & DMAIC application in Project Management

Both approaches are from the Lean World. Adhering to one or the other enables the Project Manager to comply to both the ISO certifications and the company's QMS. It also ensure that deliverables are to the highest Quality standards, thus leading to Customer satisfaction and business continuity. It also secures outcomes of potential audits no matter if internal or external from Regulatory bodies.

		Plan		Do	Check	Act
		Specify Value	Understand the demand	Flow	Level	Perfection
Activities	Define	Measure	Analyse	Improve	Control	
		<ul style="list-style-type: none"> Identify the problem = Business case Project charter Develop SIPOC map Map business process Map value stream Gather VoC + VoBusiness Develop CCR's & CBR's Finalise project focus 	<ul style="list-style-type: none"> Output metrics Develop operational definitions Develop data collection plan Validate measurement systems (KPIs) Collect baseline data Determine processes Performance/Capability Validate business opportunities 	<ul style="list-style-type: none"> Propose critical X's Prioritise critical X's Conduct root cause analysis on critical X's Validate critical X's Estimate the impact of each X or Y Quantify the opportunity Prioritise the root causes 	<ul style="list-style-type: none"> Develop potential solutions Develop evaluation criteria & select best solutions Evaluate solution for risk Optimise solution Develop "to-be" process maps & high-level implementation plan Develop pilot plan Pilot solution 	<ul style="list-style-type: none"> Develop SOPs, training plan & process control system Implement process changes & controls Monitor & stabilise process Transition project to process owner Identify project replication opportunities Calculate financial benefit
Tools	<ul style="list-style-type: none"> → Project selection tools → PIP management process → Edit value stream map → Financial analysis "as is" & "to be" expectations → Project charter → Stakeholders analysis → Communication plan → SIPOC map → High Level process map → Non value added analysis → VoC & Kano analysis → RACI & Quad charts → Multi generation plan 	<ul style="list-style-type: none"> → Operational definitions → Data collection plan → Histograms/Pareto chart → Statistical sampling → Measurement system Analysis (MSA) → Gage R&O → Constraints identification → Setup reduction → Generic pull → Control charts → Process capability, Cp & Cpk 	<ul style="list-style-type: none"> → Pareto charts → C&E matrix → C&E/fishbone diagrams → Brainstorming → Detailed "as-is" process maps → Basic statistical tools → Non value added analysis → Hypothesis testing → FMEA → Box interaction plots → Simple & multiple regression → ANOVA 	<ul style="list-style-type: none"> → Brainstorming → Benchmarking → Process improvement techniques → Line balancing → Process flow improvement → Replenishment pull → Purchasing & sales strategy → Poka-yoke & 5S → FMEA & TPM → Solution selection matrix → "To-be" process maps → Piloting & simulation 	<ul style="list-style-type: none"> → Control charts → Standard operating procedures (SOP's) → Training plan → Communication plan → Implementation plan → Visual process control → Process control plans → Project commissioning → Project replication → PDCA cycle 	

In Summary

ISO Norms & Standards and project management meet at the intersection of Quality management, collaborative business relationships, project management processes, and project management tools and techniques.

By incorporating ISO standards into their project management practices, organisations can improve their project delivery and overall performance :

1. ISO standards, such as ISO 9001, focus on Quality Management Systems. These standards help organisations to establish and maintain a Quality management system that ensures consistent and high-quality products or services. In project management, Quality management is essential for delivering projects that meet the required standards.
2. ISO 44001 is a standard that focuses on collaborative business relationships. It provides guidelines for managing collaborative relationships between organisations. In project management, effective collaboration is crucial for successful project delivery. ISO 44001 can help project managers to manage collaborative relationships more effectively.
3. ISO standards can provide guidance on project management processes. For example, ISO/TC 286 focuses on collaborative business relationship management. This standard can help project managers to implement effective project management processes that involve collaboration between organisations .
4. ISO standards can also provide guidance on project management tools and techniques. For instance, Gantt charts, work breakdown structures, and project networks are common project management tools that can be used to manage projects effectively.

By ensuring ISO standards are adhered to into their project management practices, organisations can improve their project delivery and their overall performance.

Acquire & Deepen your Knowledge



Process Improvement with CMMI® v1.2 and ISO Standards by Boris Mutafelija and Harvey Stromberg - ISBN-10 : 1420052837 & ISBN-13 : 978-1420052831

ISO 9001:2015 in Plain English by Craig Cochran - ISBN-10 : 1932828729 & ISBN-13 : 978-1932828726

Implementing Iso 9001:2015: Thrill your customers and transform your cost base with the new gold standard for business management by Jan Gillett (Author), Paul Simpson and Susannah Clarke (contributors) - ISBN-10 : 1908984503 & ISBN-13 : 978-1908984500

ISO 9000 Quality Systems Handbook-updated for the ISO 9001: 2015 standard: Increasing the Quality of an Organization's Outputs by David Hoyle ISBN-10 : 1138188646 & ISBN-13 : 978-1138188648

Awareness for ISO 9001 2015 Quality Management System (QMS): Easy To Understand A Clause By Clause Elaboration Of The Standard by Syed Owais Mukhtar - ASIN : B08LGKCMVD (Kindle format)

The Lean Six Sigma Pocket Toolbook: A Quick Reference Guide to 100 Tools for Improving Quality and Speed by Michael L. George ISBN-10 : 0071441190 & ISBN-13 : 978-0071441193

The Lean Toolbox 5th Edition: A Handbook for Lean Transformation by John R Bicheno and Matthias Holweg ISBN-10 : 0956830757 & ISBN-13 : 978-0956830753

Lean Thinking: Banish Waste And Create Wealth In Your Corporation by James P. Womack and Daniel T. Jones ISBN-10 : 0743231643 & ISBN-13 : 978-0743231640

The Machine That Changed the World by James P. Womack), Daniel T. Jones and Daniel Roos - ISBN-10 : 1847370551 & ISBN-13 : 978-1847370556

Lean Methodology: A Guide to Lean Six Sigma, Agile Project Management, Scrum and Kanban for Beginners (Lean Thinking) by Robert McCarthy ISBN-10 : 1655937529 & ISBN-13 : 978-1655937521

Q&A Time...

For the next 30 minutes, the floor is going to be opened to your questions .

This is your chance to get clarification, share your insights, and explore the subject matter in more depth. Please feel free to raise your hand or submit your questions through the chat.

I'll do my best to address each query thoroughly and in a timely manner. If I'm unable to get to your question today, I'll ensure to follow up with you afterwards.

Our goal is to have a productive, interactive dialogue that leaves you with a better understanding on the matter and its practical applications.

So don't hold back - let's dive in and see what questions you have !



THANK YOU
for attending this awareness.
Do not forget our next events !
To contact this webinar host :

isabelle.jenkins@setec.com

