

The Asset–Reliability–Maintenance Playbook (the “Playbook”)



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Background

There is little doubt that the introduction of ISO 55001 in 2014 was a significant step forward for asset management; it not only systematised asset management but brought asset management into the mainstream of management systems and management system thinking.

This led to the emergence of asset management professionals who entered the discipline of asset management via the management system route rather than the traditional maintenance and/or reliability routes. This in turn had the potential to de-value maintenance and reliability as integral elements to a mature asset management system.

This document frames these three critical organisational disciplines of asset management, reliability and maintenance as a single, connected system whereby:

- Asset Management sets the strategic direction and lifecycle priorities.
- Reliability Management turns strategy into measurable targets and improvement programs, and
- Maintenance Management delivers the hands-on work that sustains asset performance.

Reliability Management and Maintenance Management are typically tactical functions and high-impact operational disciplines that enable the organisation to consistently execute its business strategy.

A plant hums with machines, control panels glow and a small team moves between scheduled tasks and unexpected breakdowns - every decision about spare parts, inspection frequency, or capital renewal ripples through safety, cost and production. In this environment, Asset Management, Reliability Management and Maintenance Management are not abstract functions - they are the practical levers that keep operations safe, productive and cost effective.

This document may be read as a practical guide for organisations at any scale. For small organisations it explains how a generalist can coordinate across disciplines and draw on subject matter experts. For medium sized organisations, it shows common two-role splits and handoffs. For large, mature organisations, it describes a fully integrated model where strategy, analysis and execution seamlessly operate in unity.

Use the mapping below to align governance, data and skills with your organisations' current and desired maturity level. The infographic translates the system into concrete activities, roles and decision points so teams can see where responsibilities sit and how they interact.

Interrelationship Between the Three Disciplines

This section is an overview of how Asset Management, Reliability Management, and Maintenance Management relate to each other, how responsibilities typically scale with

organisational size and what this means in practice for governance, skills, competency and decision making.

Asset Management

- The strategic, whole-of-life discipline that sets objectives, governance, investment priorities and configuration control for assets.

Reliability Management

- The glue between strategy and execution. It translates asset objectives into reliability targets, failure-mode understanding, data analysis and improvement programs. It takes inputs from the planning and design processes as well as analysing the information available during the operate and maintain phases to identify potential improvements in cost, risk or performance.

Maintenance Management

- The operational discipline that plans, schedules and executes works to keep assets safe, available, and implements the tactics defined by reliability and asset strategies.

System

The above three disciplines form a layered, iterative and interactive system, whereby:

- Asset Management defines what the organisation needs from its assets.
- Reliability Management determines how to achieve those needs through design, analysis and improvement, and
- Maintenance Management delivers the day-to-day actions that realise reliability and asset objectives.

Focus	Maintenance Management	Reliability Management	Asset Management
Primary aim	Execute work to keep assets running and performing	Improve asset performance and reduce failures	Maximise whole of life value from assets
Typical activities	Planning, scheduling and execution of activities	Data analysis, RCA, FMECA, RCM and improvement programs	Strategy, lifecycle planning and governance
Typical owner in small organisations	Generalist (usually maintenance led)	SME support	SME support

How responsibilities scale with organisation size

	SMALL ORGANISATIONS	MEDIUM ORGANISATIONS	LARGE MATURE ORGANISATIONS
Typical Structure	A single generalist (often the Maintenance Manager) carries responsibility across maintenance, reliability and asset topics at a high level.	Two of the three disciplines are commonly staffed, e.g. Maintenance Management plus Reliability Management, or Maintenance Management plus Asset Management.	All three disciplines independently staffed and fully integrated with clear governance, KPIs and cross functional processes.
WORKING MODEL	The generalist relies on external or internal subject matter experts (SMEs) for detailed reliability analysis, lifecycle planning, and specialised asset governance.	Responsibilities split so that one role focuses on operations and the other role on analysis / strategy. SMEs still support gaps.	Asset, reliability and maintenance teams collaborate through formal processes (e.g. lifecycle planning, configuration control, performance evaluation).
IMPLICATION	Decisions are pragmatic and operationally focused, and strategic gaps are filled by SME input as needed.	Better separation of short-term execution and medium-term improvement, but some integration work remains ad hoc.	Stronger alignment between investment, reliability improvement and operational delivery. Continuous improvement is embedded.

Practical implications and recommended focus areas

Governance and planning:

- Small organisations should document asset objectives and escalation paths for SME input.
- Medium organisations should formalise handoffs between strategy and execution.
- Large organisations should embed governance across lifecycle stages.

Data and information:

- Even small teams must capture basic failure and work data to enable SME analysis.
- Medium and large organisations should invest in integrated information management to support reliability analytics and asset performance evaluation.

Skills, competence and capability:

- Generalists need broad competence plus access to SMEs.

- Medium organisations should develop in-house reliability capability.
- Large organisations should maintain specialist teams and training pipelines.

Decision making

- Use a risk-based approach at every scale.
- Small organisations via SME advice.
- Medium via combined operational/analytical review.
- Large via formal risk and investment committees.

Integration

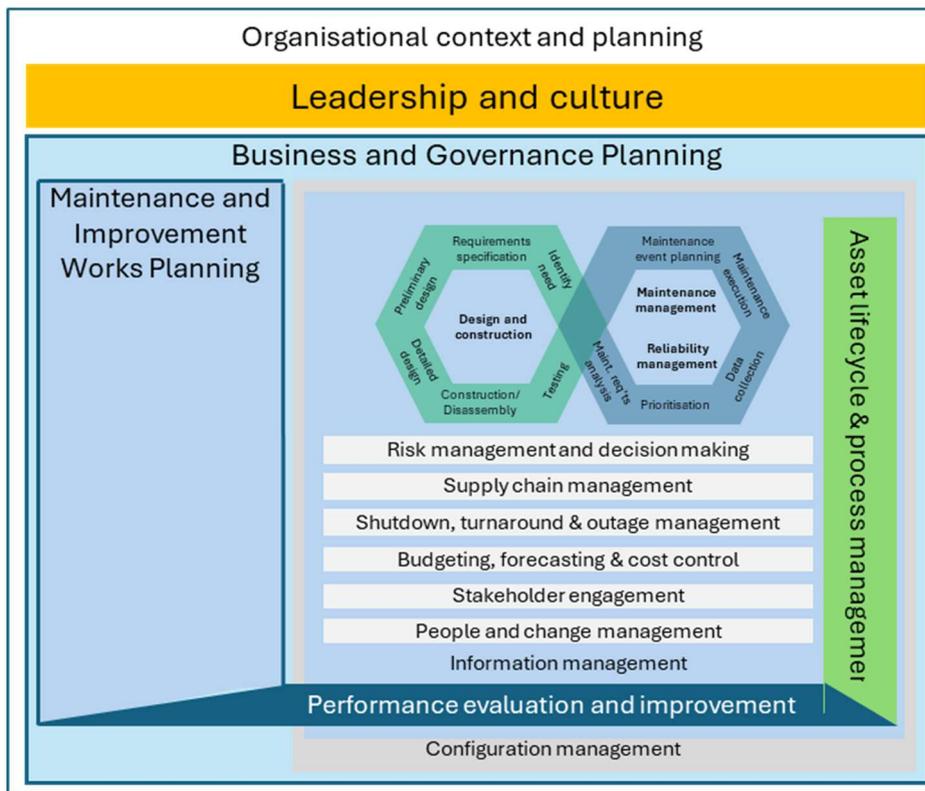
- Aim for clear roles, shared key performance indicators (KPIs) and regular cross-discipline reviews so that asset strategy, reliability improvement and maintenance execution reinforce each other.

SME support for generalists

- Provide deep technical analysis (e.g. failure modes, root cause analysis, design recommendations, maintenance program development and analysis).
- Translate operational data into reliability interventions and lifecycle cost trade-offs.
- Advise on standards, specifications and configuration to align maintenance practice with asset strategy.
- Mentor and upskill the generalist to progressively internalise critical capabilities.

Functional Mapping

Maintenance, Reliability and Asset Management Interrelationship Infographic



Each of the elements from the above Infographic are mapped in the tables (and related Harvey Ball assessments) below by the extent to which they practically relate to the disciplines of Maintenance, Reliability and Asset Management.

For clarity, each symbol reflects the extent to which a given discipline must be capable of understanding, influencing, or engaging with the element to perform effectively, rather than whether the discipline is the primary “owner” of the topic.

In practice, this means:

- A full circle (●) indicates that the discipline requires deep capability and active involvement in the element to fulfil its role effectively.
- A three-quarter circle (◐) indicates strong working capability is required, even if the discipline is not the formal owner.
- A half circle (◑) indicates functional awareness and integration capability is required to support decisions, hand-offs, or coordination.
- A quarter circle (◒) indicates contextual understanding is required, typically to interpret impacts or constraints rather than to lead activity.

- An empty circle (○) indicates limited direct capability requirement, usually where reliance on other disciplines or specialist inputs is appropriate.

Importantly, the Harvey Ball assessment does not imply that topics belong exclusively to one discipline. Many elements, such as leadership, risk, information, lifecycle decisions, or governance are inherently cross-disciplinary.

The assessment instead highlights where capability depth matters most, and where informed participation is sufficient.

	Element	Maintenance Management	Reliability Management	Asset Management
Organisational management	Organisational context and planning	◐	◐	●
	Leadership and culture	◐	◐	●
	Business and governance planning	◐	◐	●
	Maintenance and improvement works planning	◐	◐	●
	Configuration management	◐	◐	●
	Performance evaluation and improvement	◐	◐	●
Asset Lifecycle Management	Design and construction	◐	◐	◐
	Identify need	◐	◐	●
	Requirements specification	◐	◐	◐
	Preliminary design	◐	◐	◐
	Detailed design	◐	◐	◐
	Construction/Disassembly	◐	◐	◐
	Testing	◐	◐	◐
	Maintenance management	●	◐	◐
	Maintenance event planning	●	◐	○
	Maintenance execution	●	◐	○
	Reliability management	◐	●	◐

	Element	Maintenance Management	Reliability Management	Asset Management
	Data collection and prioritisation			
	Maintenance requirements analysis			
Process management	Risk management and decision making			
	Supply chain management			
	Shutdown, turn around and outage management			
	Budgeting, forecasting and cost control			
	Stakeholder engagement			
	People and change management			
	Information management			

Appendix 1 – The Infographic Elements

Organisational Management

Organisational Context and Planning

The Organisation's purpose influences the scope of its activities and objectives. The organisational purpose and its operating context define the success criteria and influence the decision-making criteria used in Asset Management. It guides the Asset Management capabilities required.

The operating context relates to internal and external factors that influence the risks and opportunities of the organisation. Organisational context has several dimensions and includes social, cultural, regulatory, political, financial, economic, environmental aspects in local, national, and international context. It encompasses:

- Mission and vision.
- Identification and assessment of internal and external stakeholders and their requirements.
- Products and/or services.
- Governance, enterprise risk, compliance, and policy frameworks.
- Strategic/business plan and objectives.

Organisational context includes identification of legal obligations and compliance requirements with respect to governing Acts and Regulations. It also outlines the organisation's commitment to its stakeholders and defines how Asset Management contributes to its objectives. The scope and the boundaries of Asset Management, the Asset Management system and other management systems are set, and their interfaces are defined.

The purpose and context of the organisation should be continually reviewed for relevance, and changes should shape the Asset Management System as it adapts. The triggers and timeframe for undertaking these reviews depend on the dynamics of the operating context and on the organisation's Management of Change process.

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Leadership and Culture

Asset Management leadership is required to promote a whole life approach to delivering Organisational Strategic Plans and Asset Management objectives.

Leaders motivate their teams towards the successful completion of objectives by communicating established interpretations, sharing knowledge and skills to encouraging teamwork and leading by example.

Leadership competencies and skills include emotional intelligence, resilience, and effective communication. Asset Management, Maintenance and Reliability leaders also need to take a

transformation approach to encourage creativity and innovative thinking. Transformational leaders inspire and motivate people to embrace positive change and to continually improve the organisation's approach.

Leadership can be assigned, via a role in an organisation, or assumed, by an individual wanting to add value to their organisation. On that basis, all members of an organisation could have some degree of leadership. However, people will naturally look to senior management roles for commitment in delivering objectives that support and enhance their own leadership responsibilities.

Effective leaders drive an Asset Management, Maintenance and Reliability culture and the supporting behaviours by engaging with people. They manage the continuity of competence and talent with a view to achieving objectives. They also understand generational intelligence and recognize that there may be different approaches to work across the generations within their organisation.

To be successfully established, operate, and continuously improve, employees need to understand the objectives, and their role in achieving them. This requires leadership commitment from all levels of the organisation's management.

Leadership enables teamwork to be translated into planned results and the achievement of excellence. Sustainability has clear alignment between the organisation's strategic plans and the Asset Management, Maintenance and Reliability activities delivered by employees. This alignment provides assurance that everybody understands how they contribute to achieve success.

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Business and Governance Planning

Business and governance planning brings together the strategic direction of an organisation with the structures that ensure it is run responsibly and effectively. The business planning focuses on defining goals, setting priorities, allocating resources, and mapping out how the organisation will achieve its objectives. It clarifies what success looks like, and the operational steps required to get there.

Business planning is where the expected value to be created by the organisation comes from. Governance planning complements this by establishing the decision-making framework and who holds authority, how accountability works, and which policies, controls, and oversight mechanisms guide behaviour across the organisation.

When these two elements are aligned, an organisation gains both clarity of purpose and confidence in execution. Strong governance ensures that strategic plans are carried out ethically, transparently, and in compliance with legal and regulatory expectations. It reduces risk, strengthens stakeholder trust, and supports long-term sustainability. Together, business

and governance planning create a coherent system that not only sets direction but ensures the organisation is equipped to follow it responsibly and effectively.

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Maintenance and improvement works planning

Maintenance and improvement works planning is focused on creating the conditions for reliable, efficient change. It begins with defining the problem or opportunity clearly, then translating that into a structured scope of work that aligns with asset strategies and operational priorities.

The scheduling process also bridges short-term needs with long-term goals. Improvement works often involve upgrades, redesigns, or process changes, so schedulers coordinate across engineering, operations, and maintenance to validate assumptions and confirm that the proposed solution is both technically sound and operationally practical.

By integrating maintenance tasks with improvement initiatives, organisations reduce downtime, capture efficiencies, and build a more resilient asset base. When done well, scheduling becomes a strategic lever to turn routine maintenance and targeted improvements into a coherent, value-driven program.

Maintenance Work Management, also referred to as Maintenance and Improvement Works Planning, or Maintenance Planning and Scheduling, is a structured process used to ensure that maintenance activities are carried out efficiently, effectively and at the right time.

Maintenance work management is the systematic approach to **I**dentifying maintenance work, **P**lanning, **S**cheduling, **E**xecution, **C**lose-out and **A**nalysis. This is sometimes referred to as the IPSECA process. The goal is to optimize equipment reliability, increase equipment availability and uptime, and manage resources effectively. It involves identifying what work needs to be done, planning how the work will be executed, preparing and ordering all necessary parts, material and job plan information, and scheduling the work so that it can be executed safely and efficiently by people with the right knowledge, skills and competencies.

After the work is complete, closing information is gathered including what was performed, costs, duration of work and identification of any follow-on work activities. Analysis is the last step and enables both process continuous improvement and asset health monitoring.

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Configuration Management

Configuration management is the process of identifying, organising, and controlling the components that make up a system, so it remains stable, reliable, and predictable as it evolves. It ensures that every element including software, hardware, documentation, or processes are clearly defined, tracked, and maintained in a known state. By establishing baselines and managing changes systematically, configuration management prevents confusion, reduces errors, and supports consistent performance across the organisation.

Beyond simply tracking components, configuration management creates the structure that allows teams to implement changes confidently and safely. It provides visibility into what exists, what has changed, and why those changes were made. This strengthens quality assurance, supports compliance, and enables efficient troubleshooting. When applied well, configuration management becomes a foundation for operational integrity, helping organisations scale, innovate, and maintain control over increasingly complex systems.

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Performance Evaluation and Improvement

Performance evaluation and improvement is the process of assessing how well an organisation's business activities and processes, or a team or individual is achieving expected outcomes and then using those insights to drive better results. It involves measuring performance against defined goals, analysing strengths and weaknesses, and identifying the factors that influence success. Effective evaluation is evidence-based, systematic, and aligned with strategic priorities, ensuring that performance data is meaningful rather than merely routine reporting.

Improvement is the forward-looking counterpart to evaluation. It turns insights into action by refining processes, strengthening capabilities, and addressing gaps that limit effectiveness. This can include redesigning workflows, enhancing skills, updating systems, or shifting priorities to better support organisational goals. This includes those activities where there are individual instances of non-conformances that must be addressed. When evaluation and improvement operate together, they create a continuous cycle of learning and improvement helping organisations adapt, innovate, and sustain high performance over time.

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Asset Lifecycle Management

Asset lifecycle and process management focuses on getting the maximum value from assets from the moment they are conceived to the moment they are retired, sometimes called lust to dust. It involves understanding how assets perform, degrade, and interact with the broader operational environment.

Strong lifecycle management ensures that decisions about design, procurement, operation, maintenance, and replacement are made deliberately, using data and risk insights rather than intuition. This long-term approach reduces total cost of ownership and improves reliability by aligning each stage of the asset's life with organisational goals.

Process management provides the structure that makes lifecycle decisions repeatable and effective. Clear, well-governed processes define how work is planned, executed, reviewed, and improved, ensuring consistency across teams and over time. When lifecycle thinking is paired with disciplined processes, organisations create a closed feedback loop: operational experience informs future design choices, maintenance insights shape investment decisions, and performance data drives continuous improvement.

The result is an asset base that becomes more reliable, predictable, deliver expected outcomes at lowest cost and is cost-effective year after year.

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Design and construction

Design and construction form the foundation of asset performance, setting the conditions for reliability, safety, and maintainability long before operations begin.

Good design starts with a clear understanding of functional requirements, operating environments, and lifecycle expectations. It integrates engineering principles with practical insights from maintenance and operations, ensuring that assets are not only efficient and compliant but also accessible, serviceable, and resilient. Decisions made at this stage have long-lasting consequences, influencing everything from failure rates to total cost of ownership.

Construction brings the design to life, translating drawings and specifications into reality. Effective construction management focuses on quality, sequencing, and coordination across contractors, suppliers, and stakeholders. It ensures that materials meet standards, work is executed safely, and deviations are controlled and documented. When design and construction are tightly aligned, the result is an asset that performs as intended from day one which reduces commissioning issues, minimizing early-life failures, and creating a strong foundation for long-term operational success.

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Identify need

Identifying the need involves defining the business problem or opportunity and defines the limits of the solution space. It can also identify potential solution(s) that could address a problem or take advantage of an opportunity.

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Requirements specification

Requirements specification is the process of defining, in clear and unambiguous terms, what a system, asset, or project must achieve. It translates needs, constraints, and expectations into structured, testable statements that guide design, procurement, construction and operation.

A strong specification focuses on outcomes rather than assumptions about solutions, ensuring that stakeholders share a common understanding of performance, functionality, safety, compliance, and lifecycle expectations. This clarity reduces rework, prevents scope creep, and creates a solid foundation for decision-making.

Effective requirements specification also depends on disciplined collaboration. It draws input from engineering, operations, maintenance, safety, and end users to ensure the requirements reflect real-world conditions and long-term needs. Good specifications are traceable, measurable, and adaptable. They should be detailed enough to prevent ambiguity but flexible

enough to accommodate innovation. When done well, requirements specification becomes a strategic tool that aligns technical intent with organisational goals and sets the stage for reliable, efficient, and cost-effective outcomes.

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Preliminary design

Preliminary design is the stage where ideas begin to take structured form. It translates requirements into conceptual solutions, exploring different configurations, technologies, and approaches to determine what is feasible and most aligned with performance, cost, and risk objectives. At this point, engineers and stakeholders evaluate alternatives, identify key constraints, and outline the major systems and interfaces. The goal is not to finalise every detail but to establish a clear direction that balances functionality with practicality.

This phase also sets the groundwork for detailed design and later project stages. Preliminary design defines the overall architecture, major components, and expected operating conditions, while highlighting uncertainties that require further analysis. It provides enough clarity for cost estimation, scheduling, and risk assessment, enabling informed decisions about whether to proceed, refine, or rethink the concept.

When done well, preliminary design becomes a strategic checkpoint, ensuring that the chosen solution is both technically sound and aligned with long-term operational and business needs.

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Detailed design

The design process develops sufficient detailed data and information about the system and its elements to enable construction of the asset and its support environment consistent with the preliminary design and requirements specification.

The design addresses all aspects of construction and disassembly of any existing assets including as mechanics, electronics, software, chemistry, human operations, maintenance and reliability.

Design provides the 'implement-to' level of the definition, such as drawings and detailed design descriptions, maintenance requirements analysis including proposed maintenance program and definition of all supporting management system elements, not just the design of the asset.

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Construction/Disassembly

The Construction/Disassembly process turns the design of specified system elements, the asset and associated management system elements into assets.

This process transforms requirements, architecture, design, including interface, into a (sub) system according to the practices of the selected implementation technology, using appropriate technical specialties or disciplines.

This process results in a (sub) system that meets the requirements specification and ensures that it is integrated into the broader organisational and systems environment.

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Testing

The testing process ensures:

- What was designed, was built
- What was built, met the requirements specification

Testing identifies the errors, defects, or faults in any structured and unstructured data, implemented system elements, or life cycle processes. This process identifies errors, defects and faults and determines their acceptability and/or remedial action to address them prior to progression to the next phase.

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Maintenance Management

Maintenance management is the discipline of ensuring that assets remain safe, reliable, and cost-effective throughout their lifecycle. It blends strategy with day-to-day control which includes defining maintenance policies, setting performance standards, allocating budgets, and choosing the right mix of preventive, predictive, and corrective work.

Strong maintenance management creates a system where decisions are driven by data rather than urgency, and where equipment health is monitored as closely as financial performance. At the operational level, effective maintenance management builds the environment in which planning and execution can succeed. That means establishing clear roles, maintaining accurate asset information, enforcing work processes, and cultivating a culture that values precision and accountability.

It also involves a continuous focus on the following

- Improving key performance indicators (KPIs).
- Learning from failures.
- Refining practices so the organisation becomes more resilient over time.

When done well, maintenance management transforms maintenance from a cost centre into a value creation activity for strategic advantage.

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Maintenance event planning

Maintenance event planning is all about reducing uncertainty. A well-run plan starts by defining the scope of work with absolute clarity and includes what needs to be done, why it matters, and what “done” looks like.

From there, planners identify required parts, tools, permits, skills, and dependencies, making sure everything is available before the event begins. This front-loading prevents the classic pitfalls of reactive maintenance including delays, rework, and safety risks.

Once the scope and resources are ‘locked in’, the focus shifts to coordination. Effective planners sequence tasks to minimize downtime, align teams, and avoid bottlenecks. They communicate expectations early, build contingency buffers for the unexpected, and ensure that safety and compliance requirements are embedded into the workflow rather than bolted on at the end.

The result is a maintenance event that is uneventful, predictable, efficient, and controlled.

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Maintenance execution

Maintenance execution is where all the planning work turns into real-world results. The goal is disciplined, predictable action. Where technicians arrive with the right parts, tools, and information, and tasks are carried out in the correct sequence without unnecessary delays.

Strong execution depends on clear work instructions, effective supervision, and tight coordination between operations and maintenance, so equipment is safely released, worked on, and returned to service.

During the event, the focus shifts to control and communication. Good execution teams track progress against the plan, escalate issues early, and make informed adjustments without compromising safety or quality. They document findings, capture follow-up work, and verify that equipment is restored to the required operating condition.

When done well, maintenance execution feels smooth and almost routine which is a sign that the organisation has mastered the balance between efficiency, safety, and technical rigour.

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Reliability Management

Reliability management is the discipline of ensuring that assets consistently perform their intended function under expected conditions. It blends engineering insight with operational discipline to identify failure modes, understand their causes, and implement strategies that prevent or mitigate them. This involves using data from inspections, sensors, maintenance history, and operating conditions to predict issues before they occur and to optimise the balance between preventive, predictive, and corrective work.

At its core, reliability management aims to reduce unplanned downtime, improve safety, and extend asset life while controlling cost. Strong reliability management also depends on culture and process. It requires cross-functional collaboration between operations, maintenance, engineering, and leadership so that decisions are based on evidence rather than habit or urgency.

Effective organisations treat failures as learning opportunities, not just events to fix, and they embed continuous improvement into everyday work. When reliability principles guide both technical decisions and organisational behaviour, assets become more predictable, risks decrease, and performance steadily improves.

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Data collection and prioritisation

Data collection and prioritisation is about turning raw information into actionable insights. Effective data collection starts with the clarity of knowing what you need to measure, why it matters, and how the data will be used. This means defining key metrics, establishing consistent methods for capturing them, and ensuring the information is accurate, timely, and accessible.

Good collection practices avoid the trap of gathering everything “just in case” and instead focus on data that directly supports decision-making, performance monitoring, and continuous improvement.

Prioritisation is the discipline that keeps data from becoming noise. Once information is collected, it must be filtered, ranked, and interpreted based on risk, impact, and strategic relevance. High-value issues affecting safety, reliability, cost, or compliance should rise to the top, while lower-impact items are scheduled, monitored, or deferred.

This structured approach ensures that limited resources are directed where they create the most value. When data collection and prioritisation work together, organisations gain clarity, focus, and the ability to act decisively rather than reactively.

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Maintenance requirements analysis

Maintenance requirements analysis is the process of determining what an asset truly needs to remain safe, reliable, and cost-effective over its life. It starts by understanding how the asset is designed to function, the conditions it operates in, and the ways it can fail.

Using tools like failure mode analysis, performance data, and manufacturer recommendations, analysts identify the specific tasks, frequencies, and skill sets required to prevent or mitigate those failures. The goal is to avoid both over-maintenance, which wastes resources, and under-maintenance, which increases risk and downtime.

A strong requirements analysis also connects technical insight with operational reality. It considers production schedules, environmental constraints, regulatory obligations, and the organisation’s tolerance for risk. The result is a tailored maintenance strategy that aligns effort with value ensuring that every task has a clear purpose, contributes to reliability, and supports broader business objectives.

When done well, maintenance requirements analysis becomes the foundation for effective planning, budgeting, and continuous improvement.

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Process Management

Risk management and decision making

Risk management and decision-making are inseparable elements of effective governance - two sides of the same coin. Every decision is made with some uncertainty and managing that uncertainty with a structured approach to risk ensures decisions are informed, balanced, and aligned with strategic objectives or the organisation's value drivers.

Conversely, risk management provides practical actions to ensure that all hazards and opportunities are identified and the uncertainty they create is tolerable or if a risk assessment indicates the risk is not tolerable and the proposed action should not proceed, then a decision has been made.

Together, risk management and decision making create a dynamic cycle where understanding risks shapes better decisions, and decisions, in turn, influence the risk landscape.

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Supply chain management

Supply chain management aims to ensure that the right materials, spare parts, services, and specialist support are available at the right time, in the right condition and at the right quality and cost to keep assets performing as intended.

When the supply chain is managed effectively, maintenance work is completed safely, efficiently, and with minimal downtime to an agreed reliability. It integrates planning, procurement, suppliers, logistics, inventory, and contractors across the asset life cycle.

Supply chain activity provides the most value when considered early in the asset lifecycle during the identification of the need to procure goods and/or services. The Supply Chain Operations Reference (SCOR) complements the GFMAM Maintenance Framework and ISO 55001.

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Shutdown, turnaround and outage management

Shutdown, Turnaround and Outage (STO) Management refers to the structured process of planning, executing and controlling major maintenance events that require substantial partial or full stoppage of operations and production.

These events are critical for ensuring asset integrity and reliability, regulatory compliance, and safe operations in industry sectors such as oil & gas production, electrical power generation, chemicals and manufacturing.

A STO allows for completion of maintenance work that cannot be safely completed while the assets are operating, when regulatory compliance requires protective assets to be function

tested, high levels of multi-disciplinary coordination to complete work, and supports management of high risks in an environment of large-scale work and high resource intensity.

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Budgeting, forecasting and cost control

Budgeting, forecasting, and cost control form the financial backbone of any well-run operation. Budgeting sets the expectations. It translates strategy into numbers by defining how much an organisation plans to spend, where, and why. Forecasting keeps those expectations honest by updating financial projections as conditions change by incorporating new data, emerging risks, and shifting priorities. Together, they create a dynamic picture of financial health rather than a static annual snapshot.

Cost control is where discipline meets execution. It involves monitoring actual spending against budgets and forecasts, identifying variances early, and taking corrective action before small deviations become major issues.

Effective cost control isn't about cutting for the sake of cutting. It is about ensuring that every dollar spent contributes to value, reliability, or strategic outcomes. When these three practices work in harmony, organisations gain financial stability, sharper decision-making, and the confidence to invest in long-term improvement.

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Stakeholder engagement

Effective stakeholder engagement (internal and external) results in a shared understanding of expected inputs to and outcomes from organisational management systems and clarity of stakeholder needs and expectations, all of which are fundamental for the achievement of sustainable organisational success.

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People and change management

An organisation's underlying culture reflects staff engagement and commitment and directly influences the organisation's ability to achieve its goals and objectives. The implementation of proactive change management and staff engagement programs seek to establish the organisational culture necessary to realise its aspirational value proposition.

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Information management

When organisations treat information as a strategic asset rather than an afterthought, they improve collaboration, reduce operational risk, and unlock insights that drive better performance and continuous improvement.

Information management is the practice of ensuring that the right information reaches the right people at the right time so decisions can be made with confidence. It involves structuring, collecting, storing, and governing data in ways that keep it accurate, accessible, and secure.

Strong information management creates a single source of truth, reduces duplication, and prevents the chaos that comes from scattered documents, inconsistent data, or informal knowledge silos.

Beyond the technical systems like computerised maintenance management systems (CMMS), effective information management is a cultural discipline. It requires clear ownership, consistent processes, and habits that encourage people to capture, share, and maintain information as part of their everyday work.

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