

Building a Clear and Audit-Ready Asset Management Framework

Lessons from Southern Ports' Journey to ISO 55001



Southern Ports Asset Management Challenge

- Strategic driver from the board to achieve compliance
- CMMS implementation
- Digitisation of asset management
- Asset management governance
- Roles and responsibilities



Enter the Digital AMF – A Digital Enabler

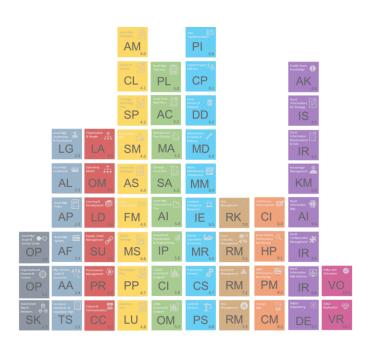


- First, what is an AMF?
- Preconfigured structure, ready for quick adoption
- Customisable to suit organisational needs
- Ensures live updates and version control

The Need for a Structured Approach

- Aligning asset management with ISO 55001
- Moving from static to a digital framework
- Creating a 'single source of truth', centralised Knowledge Management





What is the Digital AMF?

 A Structured Management System for Asset Management

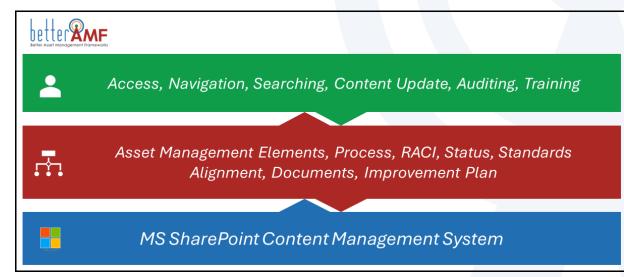
Built on Microsoft SharePoint for accessibility and easy

deployment

 Houses all asset management elements, processes, and RACI matrices

Enables real-time updates, version control, and searchability

 Preconfigured with asset management best practices but fully customisable to match Southern Ports' requirements



Implementation at Southern Ports

- Deployed in three months
- Hosted in SharePoint for easy access during implementation
- Strong stakeholder engagement ensured success
- Buy-in and complete improvement program was critical

Establish baseline digital AMF

Load betterAMF into a SharePoint environment. Alter to betterAMF match AMF requirements

Southern Ports Engagement

Engage and review documents to tailor AMF to Southern Ports requirements

RACI Assignment

Assign Roles and Responsibilities using AMF elements

Test and Deployment

Test, configure access and deploy framework for Southern Ports

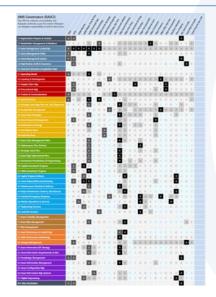


3 Month Timeline graphic showing key milestones

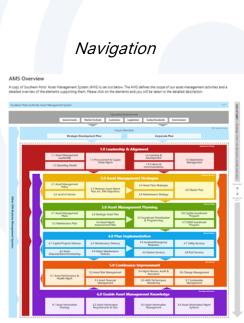
Key Benefits

- Improved visibility of roles and accountabilities
- Audit-ready: Facilitated ISO 55001 certification
- Efficiency: Eliminated duplication and outdated documents
- Usability: Intuitive interface for all staff levels
- Enhances Asset Management Governance
- Helps new starters

Asset Management Elements on a page



RACI Assignment



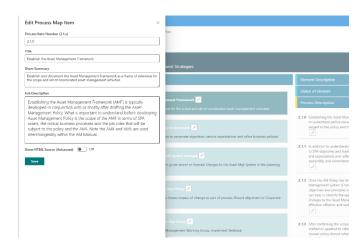


Key Lessons Learnt

- Active engagement is essential ownership matters
- Communications and training
- Adaptability is vital asset management isn't static
- Embracing digital transformation enhances decision-making



Digital AMF – One stop shop



Easy Content Management

Looking Ahead

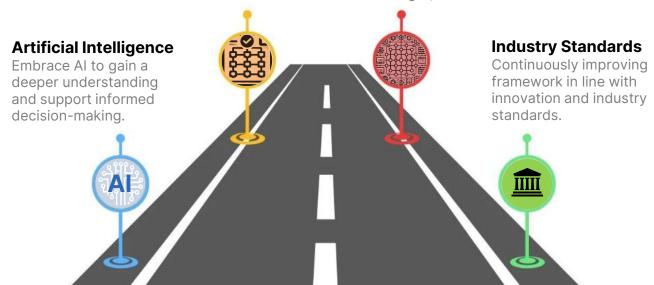
- Expanding the digital framework approach
- Integrating AI as a SME and for asset performance monitoring
- Continuous evolution with industry best practices

Integrated Assessment

Accelerating the maturity assessment process with built-in assessments.

Digital Framework Expansion

Expanding and systemising other Asset Management, e.g. digital planning, technology map, AMIP Manager, etc.

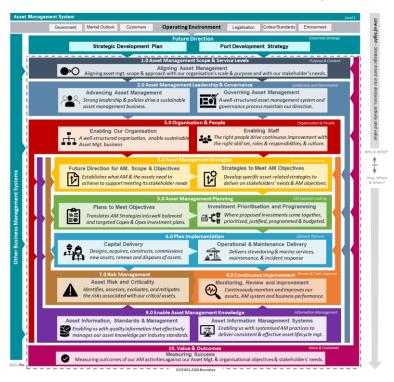


Conclusion

Get Started Transforming your AMF

- A digital AMF as an enabler, an accelerator, not just a product
- ISO 55001 success proves its effectiveness
- Other asset-intensive industries can replicate the digital framework approach

IAM 10 Box Model Framework Example





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Building a Clear and Audit-Ready Asset Management Framework at Southern Ports

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1 Abstract

Southern Ports faced the challenge of aligning its Asset Management System (AMS) with ISO 55001 while ensuring operational efficiency across multiple port locations. They required a centralised and structured approach to become the fifth port authority globally to achieve ISO 55001 accreditation. BetterAIM collaborated with Southern Ports to implement betterAMF, a dynamic asset management framework designed to provide an easy to access, one stop source of knowledge for all aspects of Southern Ports' asset management system, and to enhance its audit readiness. This paper explores the collaborative approach, implementation strategy, and the benefits realised, offering insights for other asset-intensive industries.

Keywords: Asset Management, ISO 55001, Audit Readiness, Digital Framework, Compliance, Institute of Asset Management (IAM)/GFMAM 39 Subjects/GFMAM 40 Subjects

2 Introduction

Southern Ports aimed to align its Asset Management System (AMS) with ISO 55001 to improve efficiency, centralise documentation, and define clear responsibilities across all aspects of its asset management activities. Government trading enterprises are not required to obtain ISO 55001 certification; however, achieving compliance allowed Southern Ports to demonstrate practical, prudent, and efficient asset management processes. The transition to a more structured framework was essential to overcoming challenges related to disparate asset information, outdated documentation, and difficulties in delivering the Asset Management Improvement Plan.

BetterAIM partnered with Southern Ports to introduce betterAMF, a centralised and adaptive digital framework designed as an Asset Management Manual. The framework facilitated live updates, structured process documentation, improved access to the latest documentation against each relevant framework subject area and used a digital-first approach that enhanced compliance, visibility, efficiency and auditability.

3 Challenges and Drivers for Change

Southern Ports faced significant challenges in managing asset information effectively. As with many organisations, the existing asset management manual was paper based, challenging to navigate, and rarely used across the organisation. Documentation was often outdated, which created inefficiencies in decision-making and compliance efforts. In many cases, most staff were unaware of the scope of the AMS or that a document outlining the AMS existed. Documentation underpinning each AMS element (standards, strategies, procedures, etc.) were dispersed across multiple corporate repositories and not easy for end users to find Roles and responsibilities for each interconnected AM function had gaps in clarity because there was not an easy way to access or view ownership across all systems elements in an up-to-date RACI. Without a structured system, the organisation struggled to execute its Asset Management Improvement Plan and align its operations with ISO 55001 requirements.

The leadership team at Southern Ports strongly supported the adoption of ISO 55001 to target improved governance and accountability across asset management functions. Achieving certification would not only demonstrate compliance with industry best practices but also enhance operational credibility and efficiency. Southern Ports sought a solution that could centralise asset management information, provide a structured approach to compliance, and ensure a seamless transition to a more mature asset management system.

4 Implementation Approach

Initial Assessment

Before implementing betterAMF, Southern Ports had undertaken an ISO 55001 and IAM 39 Subject Maturity Assessment. This was followed by a health check in early 2024 to assess the status of key initiatives and identify areas requiring further improvement. Based on the reviews, and changes to business priorities, organisational

purpose, structure, and the operating environment, it was identified that an AMF refresh would add clarity and improve direction. BetterAIM used the assessments to align the digital framework with Southern Ports' operational needs, ensuring that the framework addressed key issues such as RACI, documentation and process alignment gaps.

Digital-First Deployment

The digital framework was designed to integrate seamlessly within Southern Ports' IT environment. Microsoft SharePoint was selected as the deployment platform due to its ease of use, accessibility, low cost compared to other solutions, and compatibility with the organisation's digital infrastructure. This choice allowed for streamlined implementation while maintaining flexibility for future updates.

Collaboration between BetterAIM and Southern Ports was critical to the success of this transition. Led internally by Johannes Snyman, the project involved close engagement with key personnel to ensure alignment with organisational objectives. Stakeholder participation was prioritised through structured consultation sessions, enabling key team leaders and AMS element process owners to provide feedback and refine the framework iteratively. This approach emphasised the importance of engaging the owners of each AMS element, encouraging them to take ownership and agree on the content. In some cases, this led to productive discussions about overlapping or ambiguous areas of responsibility.

Rapid Deployment and Change Management

The digital framework was successfully deployed within three months. The rapid timeline was made possible by leveraging existing frameworks and tailoring them to Southern Ports' specific needs. Regular stakeholder engagement ensured the system was configured to align with Southern Ports' governance structures and operational workflows.

Southern Ports provided digital access to the evolving Digital Asset Management Manual to facilitate adoption. Process owners were empowered to modify and refine framework components in real time, ensuring the system remained relevant and responsive to operational needs. A competency and training matrix was also developed to support ongoing asset management improvements over the next three years.

Feedback from key stakeholders was overwhelmingly positive, as the digital framework provided easy access to essential asset management information that had previously been difficult to locate or was missing. The enhanced visibility and accessibility improved organisational engagement, strengthening accountability and ownership. Looking forward, a key focus area will be the required process and mindset change needed to update the framework following each change, e.g. organisational structure and role change, changes with ISO, etc.

5 Key Outcomes and Achievements

ISO 55001 Accreditation

Southern Ports became the fifth port authority in the world to achieve ISO 55001 accreditation. The digital framework played a crucial role in this achievement by providing a structured, audit-ready asset management system. One of the key innovations in the accreditation process was the ability to offer remote access to the ISO 55001 certification team, allowing for a seamless and efficient evaluation. Feedback from auditors was particularly positive, with the framework making the assessment process significantly more straightforward.

Operational Efficiencies

The implementation of the framework led to several operational improvements. By centralising all asset management elements, responsibilities, and processes into a single live framework, Southern Ports significantly enhanced the accessibility and usability of its asset management system. The framework aligns asset management activities and broader organisational objectives, ensuring a direct line of sight from strategy to execution.

In addition to compliance tracking, the digital framework allows Southern Ports to monitor its adherence to IAM's 39 Subjects and ISO 55001 requirements in real time. This proactive approach to asset management reduced administrative overheads and streamlined audit processes, making it easier to maintain compliance and drive continuous improvement.

The digital framework provides a valuable tool for onboarding and training new employees. It directly supports improvement in IAM's Knowledge Management subject area. Its visual format, backed by process descriptions, gives end users an understanding of how their outputs are used in other business processes across the organisation.

Furthermore, operational efficiencies extended to decision-making capabilities. The structured digital framework enables leadership and asset management teams to access up-to-date information instantly, reducing time spent searching for documents and improving the speed and accuracy of strategic asset management decisions.

Lessons Learned

Implementing the framework at Southern Ports highlighted several key lessons applicable to other asset-intensive industries. First, successful asset management transformation requires strong business ownership and engagement from key process owners. While the digital approach provided the necessary framework, its effectiveness at Southern Ports depends on the active participation and ongoing refinement by the owners of each framework element.

Second, asset management frameworks must be continuously updated and adapted to evolving business needs. A static approach to compliance is insufficient; organisations must remain agile and responsive to industry and organisational developments. Finally, the framework demonstrated that a structured, digital-first approach could accelerate the path to ISO 55001 compliance while improving operational efficiency and strategic alignment.

6 Conclusion and Industry Implications

The successful deployment of betterAMF at Southern Ports underscores the value of a structured, dynamic, and audit-ready asset management framework. By transitioning from a fragmented and outdated manual system to a live, interactive platform, Southern Ports has set a benchmark for asset-intensive industries seeking to enhance compliance, efficiency, and long-term asset sustainability.

Beyond compliance, Southern Ports' case study demonstrates that digital asset management frameworks can drive broader operational improvements. The principles applied in this project can be adapted to other sectors, including utilities, transportation, mining, and public infrastructure. Organisations seeking to enhance their asset management systems should consider adopting a structured framework that prioritises accessibility, alignment with strategic goals, and continuous improvement.

Future work should focus on expanding the adoption of the digital framework, integrating emerging technologies such as AI-driven asset performance monitoring, aligning with technology requirements, and further refining best practices for asset management maturity.

ASSET MANAGEMENT

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Figure 1. Southern Ports AMS Landing Page to AMS Element.