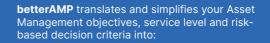
Elevate Your Asset Management with BetterAIM's Digital Planning Framework Empowering:

## Better Planning, Better Outcomes



Welcome to the digital future of asset management planning with BetterAlM's cutting-edge Digital Planning Software as a Service (SaaS) Platform. Explore how this innovative platform drives **Better** Investment Planning and **Better** Asset Management outcomes.



- · Specific prioritised interventions.
- Customer focussed and technical service level requirements.
- Investment forecasts and an understanding of their impact.
- Targeted improvement actions across your asset portfolio's lifecycle, including improvement to your data quality.

**betterAMP** improves understanding of your asset classes' health and performance and will seamlessly integrate into your asset investment planning and annual budgeting process.

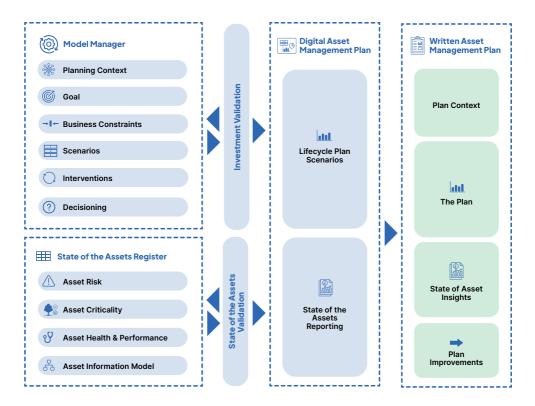
betterAMP encompasses a systemised planning approach within a Digital Planning Framework. Elements of our framework integrate with your Asset Management System (AMS) to meet your asset investment planning requirements and contribute to maturing other AMS elements.

betterAMP has value for everyone within your organisation. It benefits those accountable for asset planning and those in the operations seeking asset information and executive leaders seeking insights into potential future business risks.

# Our Digital Planning Framework

The design for BetterAlM's Digital Planning Framework separates data, lifecycle planning, insight, and production of an AM plan to provide a very flexible and adaptive environment.

The framework enables periodic and ongoing data updates at different points in the future to a point where your planning can be considered 'live'.



The Digital Planning Framework has a 4-tier architecture housed primarily in our Microsoft Azure cloud-based SaaS environment. It consists of;



## The Model Manager

The decision engine for all your planning needs. The self-service model manager allows asset management professionals to configure and run lifecycle models according to the specific decision criteria, goals and objectives you are trying to achieve.



### The State of the Asset Register

The Digital Planning Framework Asset Information Model holds all the information needed in an appropriate and adaptable business context to do strategic and tactical planning, report on the state of your assets and forecast your investment needs at an asset class or portfolio level. All asset information is housed in our secure Cloud-based SQL Database in our cloud-based environment that can be updated on any frequency individually, bulk uploaded manually or automated via an Extract Transform and Load (ETL) based Application Programming Interface with your corporate platform.



## **Digital Asset Management Plan**

An MS Power BI Interactive Business Intelligent Report creates a digital representation of your Asset Management Plan, delivering 'current' and future asset insights. It is a dynamic, up-to-date visual dashboard-style report that allows asset managers and planners to interact with the plan and gain insights at all levels in your asset hierarchy, pulling insights directly from the betterAMP cloud-based database. Typical insights include:

- The state of assets within your portfolio.
- Priority assets for upcoming condition assessment programs.
- Proposed multi-year intervention/ investment forecasts.
- Estimated investment benefits from a reduction of risk.
- Performance insights relating to Levels of Service.
- The residual effect of constrained investment scenarios (e.g. budget constrained).

The Digital Asset Management Plan can identify the quality of critical information, informing key decisions to target improvements. The data quality visibility gives decision-makers an understanding of confidence when planning. Data can also be exported to external third-party reporting and quality assurance tools.



## The Written Asset Management Plan

A concise broadsheet style MS Word Asset Management Plan focused on the headline insights, target outcomes, and specific asset improvements to be undertaken over the plan period. The written plan is generated directly from the Digital Asset Management Plan.

Together these embody our comprehensive betterAMP solution.

## Comprehensive Asset Information Management

Unlock the full potential of understanding your assets with the State of Assets (SoA) Register - your portal to comprehending, visualising and conveying information about your asset portfolio. This register encompasses a rich spectrum of information, from physical attributes to location, condition, criticality, and risk assessment. Delve into the Functional Asset Hierarchy, leveraging data to anticipate future asset health and predict required interventions across different asset hierarchical levels. This process paves the path for informed investment decisions and prioritised work programs. betterAMP easily can source, transform and present your data from your typical multiple source data repositories.

betterAMP not only comprehends this wealth of information but also draws strength from our **betterClass** System, an asset classification framework aligned with industry standards such as Uniclass!. This enables our clients to adopt, or partly adopt quickly, essential classification specifics for describing their asset's purpose, enhancing the insights and decision criteria for investment planning purposes.

The ease at which data can be configured within betterAMP means deficiencies in existing hierarchies can easily be remodelled as a precursor for direct improvement in your corporate systems.

'Uniclass is a classification system for organising and managing information within the construction industry, facilitating standardised categorisation of objects and concepts related to infrastructure projects and during operations.

# Intelligent Model Manager: The Core of betterAMP

At the heart of the betterAMP is its Model Manager – the catalyst for informed decisions.

#### It empowers you to:

<b>Predic</b>	et F	ut	tur	е
<b>Asset</b>	He	al	th	

Anticipate current and future asset health for specific failure scenarios using our preloaded or your degradation patterns, including insights into residual effects, remaining useful life adjustments, and reduced failure probabilities post-intervention.

# Build Lifecycle Intervention Strategies:

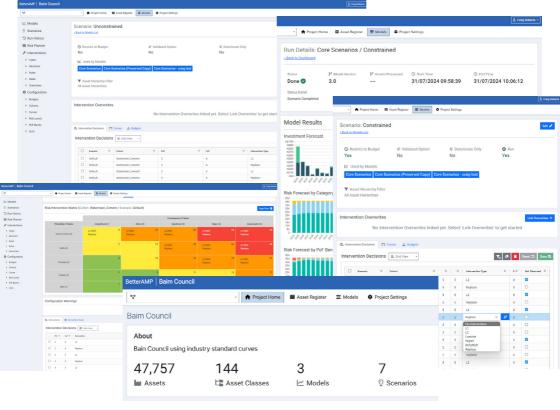
Develop lifecycle intervention scenarios (augmentation, inspections, testing, refurbishments, repairs, renewal, maintenance) for a specific goal using advanced risk-based asset cohort and business decision criteria (e.g. budget constraints), elevating your investment planning effectiveness. We work with you to align risk to your corporate risk appetite.

# Configuration Flexibility:

Seamlessly tailor betterAMP for diverse asset classes through various project, model, and scenario level configurations, eliminating the need for bespoke complex code changes.

# Forecast Interventions:

Predict multi-year investment forecasts for your desired objectives, recorded at the maintainable asset levels, contributing to robust investment planning.



# **Assured Validation Process**

The State of Asset and Intervention Validation process ensures data integrity and preparedness for more accurate investment planning and the generation of annual work programs. Leverage the validation process within the SoA to refine asset information using external verified sources such as condition reports and expert consultations. The validation process ensures that data quality issues identified during the initial plan development stages can be addressed before it feeds into your investment plans, informing your Capex/ Opex work programs.

## Dynamic Scenario Insights

The betterAMP SaaS Platform can generate many tailor-made scenario results. Seamlessly integrate the scenarios specific to your organisation within our Interactive Digital Asset Management Plans to gain actionable insights, optimising your Investment Plans, asset management budgets and work programs, and generally improving decision-making across the asset lifecycle.

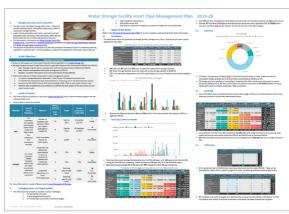


Digital Asset Management Plan - Health Dashboard Example

# Strategic Capital Prioritization

Integrate your ongoing capital program with betterAMP for enhanced capital project prioritisation.

This synergy aids in substantiating the necessity and urgency of existing projects while fostering coherence and optimisation of investment allocation across diverse investment categories.



Written Asset Management Plan - Page Example

## BetterAIM are your Asset Management Partners

betterAMP has been developed and is deployed by collaborating with our clients and our experienced asset management team. The combination of our team of asset management practitioners, who understand modern asset lifecycle management and asset information management practices, and our leading-edge cloud-based SaaS platform with sophisticated data management, lifecycle modelling and visualisation capabilities results in an immersive experience that delivers tangible operational value to our clients.

## Embark on Your Enhanced Asset Management Journey

Embrace the betterAMP SaaS Platform – your companion in initiating a dynamic "live" digital asset management plan and the perfect planning partner for your current or future Digital Twin. Experience early and cost-effective value while bypassing the complexities of on-premises enterprise solutions. Attain unparalleled clarity into your asset management requirements, setting the stage for Better Planning and Better Outcomes.

Experience the future of investment planning with the betterAMP SaaS Platform – where asset management meets innovation and asset management practitioner expertise for targeted outcomes.

## Points of difference

- betterAMP has been designed by AM Practitioners for AM Practitioners.
- The same team will be involved in its development and have been client-side asset managers developing their plans.
- We recognise that implementing new investment planning capability is more than a straightforward process. We comprehend the intricacies of preparing, analysing, and refining your data to ensure its suitability before it can be effectively modelled. However, we refuse to let inadequate data quality deter us from moving forward quickly to deliver a worthwhile outcome while continuing to fasten AM maturity.
- We deliver our digital plan with support from Asset Management Practitioners and Asset Information Specialists who understand the challenges and are experienced in developing and implementing practical plans to address them.
- You won't have garbage in, garbage out experience with us we are focused on the value at stake targeted by our clients and provide quality assurance on all data used.
- We understand the asset management decisions the Digital Plan is supporting. We provide flexible visualisations that will meet the insight needs of your decision-making audience.
- We understand Asset Management, particularly planning, data requirements, and which bits of data matter.
- We understand the cost of attaining 100% data quality and therefore help you focus on the bits that matter and the standards that must be achieved to make it fit for purpose.
- In our domain, having a strong client relationship and evolving into your reliable asset management partner takes precedence. We function as asset management advisors, not just software providers. Our dedication lies in guaranteeing that betterAMP aligns seamlessly with your operational requirements and that you'll work with experienced AM professionals.
- It's a versatile solution, not confined to a single purpose. We have an agile development team who can meet client needs rapidly and without the constraints of large organisations. We differ from a pure software provider, where you are restricted to a fixed, out-of-the-box solution.

## betterAMP's Design Principles



Explicitly designed to be data-driven, sourced from the corporate truth & to sustainably improve, manage, and profile information requirements and its quality with a whole of the asset lifecycle in mind to better support decision-making across the business.



**Designed to enable full line of sight**, e.g., link work activity, capital program, forecasts, risks, and Levels of Service outcomes.



It serves as the foundation, promotes the adoption, and expedites the development of your Asset Management System processes, facilitating frameworks and elements of asset information management.



You can engage with the plan and swiftly (with just a button click) attain substantial insights, ranging from portfolio-level assessments to individual unit details, encompassing asset conditions, projected interventions/investments, and the resultant advantages in risk mitigation and Level of Service enhancements.



Optimises assets' lifecycle management to an agreed Level of Service/Risk appetite/ Cost under any number of scenarios (what ifs), supporting long to short-term planning periods.



The foundation is structured to align with and advance the federated operational Digital Twin encompassing the entire portfolio and business applications.



A consistent planning framework, systematic process and visualisation approach across the portfolio better support usability, understanding, and broader key decision support and facilitate its operationalisation (i.e. not several disparate point purpose non-repeatable processes).



Enabling the changing of the asset management conversation across asset management, not just in planning, to focus on those things that matter, e.g., making effective decisions.



Powerful, interactive, dynamic & easy-to-use Insight discovery and reporting environment, including ad-hoc, capable of supporting decisions (tailored views) at all levels of asset locations (portfolio, facilities to unit & cross-asset) and the business across the asset lifecycle.



**Full security assurance.** Fully encrypted, multiple persona access controls, Single Sign-on, all data hosted within Australia's borders.



A modular decision engine approach supports the use and integration of best in breed 3rd party decision support tools in line with specific asset class requirements and AM maturity.

## **Technical Information**

## betterAMP Azure Platform Architecture

BetterAMP product runs on trusted cloud infrastructure from reliable partners like Microsoft Azure. Your sensitive asset data is secure by design and is encrypted in transit and storage. All data remains within Australia.

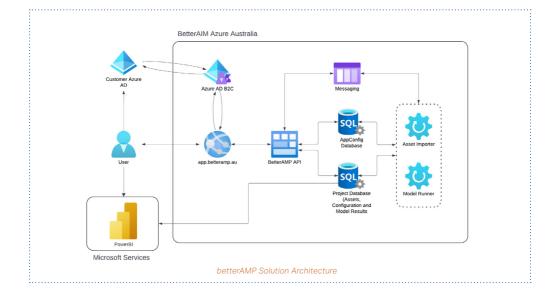
betterAMP is comprised primarily of three cloud-based components:

**SQL Server-based Databases** holding the client's State of the Asset Registers, model configuration, and scenario results. It supports fully configurable classification and function asset hierarchies.

#### betterAMP Web application

- Client Access Portal. The betterAMP platform provides a simple, easy, fully secure single-sign-on to self-manage your betterAMP projects. Client admin, editors (e.g., planners) and general viewers are all configurable. BetterAIM can also provide various managed digital planning services – please see our betterAMP support arrangements for details.
- Modelling Manager. It includes web-based User interfaces, model management and scenario run management. Modelling contains an extensive range of configuration options. Full details can be found in the betterAMP User Guide.
- **Asset Register Manager.** The State of the Asset Register allows you to traverse your asset hierarchy, create, edit and view all asset attribution.

**Power BI-based Digital Asset Management Plan** dynamically showing the state of the assets and the asset lifecycle plan tailored to the client's requirements. We offer SaaShosted Digital Asset Management Plans as well as customer-hosted options. Plans can be viewed on desktop and mobile devices.



## Data Transfer Application Programming Interface (API)

Our digital planning framework has an API enabling data to be periodically automatically passed between betterAMP's platform and client cloud-based platforms or corporate onpremises environments. The API supports data to be passed in a JSON format.

A bulk upload is available when appropriate for the initial data transfer and loading of the SoA Register.

The API is Pull/Push, enabling clients to access asset register data and model configuration and outputs through an API call. Data is expected to be paged so responses to the receiving platform would be passed in a controllable size. A bulk CSV export capability to secure blob storage can also be configured to meet client requirements.

## **User Management Controls**

#### **User Management and Administration**

betterAMP provides role-based access controls (RBAC) that restricts access to authorised users. This includes checking users' read/write access based on assigned roles.

#### Self-Management of Roles

betterAMP provides a self-service area where designated client administrators can add users and assign roles and accesses. It enables role access to be differentiated between read/write, projects, lifecycle model and viewing-only functionality.

## **BetterAIM Solution Security**

#### Security

betterAMP complies with Australian Government cyber-security policies and meets ACSC Essential Eight Maturity Model Maturity Level 1 requirements.

As part of the betterAMP Azure platform, the following security capabilities apply:

- Intelligent threat assessment (intrusion detection, DDoS protection etc.)
- Databases encrypted at rest
- · All storage transactions are HTTPS by default.
- · All calls to the API are HTTPS.
- · Application-level audit logging.

#### Secure by Design.

betterAMP is secure by design.

### **Security Accreditation**

BetterAlM's Azure cloud environment complies with ISO 20000-1, ISO 22301, ISO 27001, ISO 27017, ISO 27018, ISO 27701, ISO9001 and WCAG.

Microsoft Azure's security management protocols govern our systems and data security. These protocols are backed up by BetterAlM's security management policies and procedures covering its enterprise activities. BetterAlM retains information concerning security governance, risk assessment, risk management, security awareness, education and training activities, and third-party risk management activities.

## Policies and Standards

BetterAIM
has clarified
its security
expectations
through the
implementation
of policies,
standards,
procedures and
baselines.

## **Training**

BetterAIM has identified training requirements and has implemented a training program for all staff covering security concepts, requirements and processes so they understand their responsibilities and can assess risks.

## Automation & Self Service

Teams are provided with the tools to identify and assess risks such as automated vulnerability scanning.

## Security Monitoring

Security monitoring capabilities are in place to capture risks, identify threats and notify relevant owners and teams.

## Review and Improve

BetterAIM constantly reviews its controls' effectiveness and implements improvements in line with changing risks.

#### Authentication

betterAMP applies authentication at the client-tenant level. It leverages Azure Active Directory (AD). As part of the development process, we establish whether betterAMP will deploy as an AD instance with B2B or a client's AD instance with B2C.

### Security Web Protocols

BetterAIM's Azure-based SQL databases are encrypted at rest by default and meet AES-256 requirements. Industry-standard security web protocols are also deployed for data in transit, meeting the minimum-security web protocol level of TLS 1.2.

### Pen testing

Pen test results are performed periodically and before production use.

#### User Sign In & Audit Logging.

betterAMP provides user sign-in capabilities through the Active Directory functionality and has inbuilt audit logging viewing and compliance reporting capabilities.

### Security Monitoring Evidence.

BetterAIM can provide details of its security monitoring, demonstrating the breadth and robustness of its ongoing security management and monitoring of our digital planning framework.

This covers criteria but is not limited to, including:

- Privileged user access management
- Role-based access control
- Least privilege access provisioning
- · Client data segregation/isolation
- · Respondent accessibility/auditing/permissions
- Intended process for onboarding and offboarding users.
- · Permissions Internal portal access vs external contractor access
- Capabilities for Microsoft Azure AD SSO sign-in integration
- If not SSO integrated, password/access security policy (i.e., Password complexity/ password caching/session expiry requirements).

## Data Residency

All betterAMP data resides in Australia at rest or in transit.

## Better Planning, Better Outcomes

For more information on betterAMP and other digital asset management services and please email us at info@betteraim.com.au



Better Asset Management Plans