Take An Architectural Approach to Asset Management

FORTIG®

Take an Architectural Approach to Asset Management

The Situation

Business leaders of asset-intensive organizations are challenged to maneuver through brutal competition, increasing technology complexity, and a shifting geopolitical landscape while striving to improve their customer's experience. It's difficult to stay ahead of the competition and improve performance.

With competing priorities, limited budgets, and a fixed amount of capital, how do you persuade your decision makers that an investment in Asset Management and key industrial transformation initiatives will help your organization tackle everyday challenges and propel it into the future? You know that your organization could be the best and most innovative among its competitors. But you need funding to execute your vision.

The legacy of the past several decades created an environment with siloed applications that address different pieces of the puzzle; for example, one application for risks, one for process documentation, one for business intelligence, one for strategy mapping, one for physical assets, and the list goes on. This patchwork quilt of siloed applications makes interaction complex and is a limitation to realizing value.

Overview

Years of haphazard and undocumented business processes have resulted in piles of PowerPoint presentations, Word documents, and spreadsheets. As the number of business processes and applications grew, so did the documentation. If someone wanted an end-to-end view on how the constituent parts influenced the whole, they had to wade through this chaotic mixture of documentation. A single view of the organization's operating model was hard to find, and what was found had little connection to reality.

Throughout our work in asset-intensive organizations, we met these challenges with courage and determination.

Industrial transformation delivers the capabilities your organization must have to overcome these challenges. Your organization can create a competitive edge through —

- operational excellence
  - agility
    - innovation
      - informed decisions
        - governance over costs

Our mission is to assist business leaders of asset-intensive organizations. We took a pre-built, out-of-the-box, architected approach to Asset Management to unlock the value hidden in existing physical assets. Using our solution, business leaders are able to visualize their organization's end-to-end business processes. It's a game changer. No longer is it necessary for consultants to hold lengthy and expensive interviews to get one view of how your business processes work.

For asset-intensive organizations, 80-90% of the fundamentals are the same across all industries. The remaining 10-20% is industry vocabulary, issues specific to an industry, then issues specific to an

organization. To leverage this commonality, we built an architected Asset Management solution for an asset-intensive organizations to implement and accelerate the creation of their living management system. We named it FORTIG, our Asset Performance Accelerator (fortig.com).

To implement FORTIG, you must convince your business leaders that this is a viable approach to develop a roadmap to sustainability and ongoing prosperity. We recommend that you develop a convincing argument and compelling business case for your organization to take an architected approach to Asset Management. To support your journey, we share 6 steps for you to follow —

6 STEPS
1. What's your vision? Where you want to be?
2. Where are you now?
3. Who are the stakeholders of your assets?
4. What's your value statement?
5. How does an architected approach to Asset Management drive industrial transformation?
6. How does Asset Management demonstrate value? How do you measure the value?

Develop a Compelling Business Case in 6 Steps

STEP 1 What's your vision? Where you want to be?

Internal stakeholders of the assets work in your organization as it is today, and want to know what it will look like in the future. Each stakeholder defines success differently. Various metrics ... saving money, saving time, increasing revenues, reducing risks ... may mean different things to each stakeholder.

You have the challenge of translating the value you see in industrial transformation into meaningful benefits for each stakeholder so you can gain approval for a program of organizational change.

Speak the language of your executives. Asset Management initiatives must address their business priorities. Begin with the end goal in mind.

HOW WOULD YOUR EXECUTIVES ANSWER THESE QUESTIONS?
What are our organization's vision? business goals? strategic objectives?   today? in 6 months? in 3 years?
How do we measure our success in these areas?

Read your organization's Annual Report. You'll find many clues to the challenges that your C-suite is facing today plus its vision and top priorities for the future.

STEP 2 Where are you now?

Many business leaders find that they can't match how their organization operates with their customers' expectations, or deliver a top-notch customer experience. For example —

- The organization is overly complex; there are inefficiencies — money could be saved for better purposes and opportunities, but no one is sure where this money is wasted
- There's no comprehensive picture of the organization's operations, resources, or technology landscape
- The organization isn't agile enough to gain market share by retaining or winning enough customers; it can't respond as fast as its competitors

QUESTIONS FOR YOUR EXECUTIVES
What are the major business challenges that face your asset-intensive organization?
What are the problems that keep you up at night?

We've found that many of these challenges that the C-suite struggles with in an asset-intensive organization are rooted in their physical asset portfolio.

An architected approach to Asset Management will provide —
- A clear view of the organization's business processes, assets, risks, people, and technology resources, how they interact, and where improvements can be made
- The ability to identify business capabilities, quickly assess how internal or external changes affect them, and make adjustments to meet market needs
- Customer Journey Mapping to understand each touch-point and how to optimize all touch-points from initial customer contact to purchase and delivery of your product and services

Your organization's future is murky because there isn't enough accurate, shared data and information across the organization, nor is there the ability to determine how decisions made today affect future outcomes.

- Silos of data and information divide business groups and result in poor decisions, sub-optimal performance, and redundancy
- There are unknown gaps in critical information that's needed by employees and business groups
- There's no ability to predict what the organization will look like in one, two, or three years based on certain decisions, because no one can estimate resource needs, operational changes, or market shifts

QUESTIONS FOR YOU
What are your organization's challenges today?
How can an architected approach to Asset Management overcome these challenges?

An architected approach to Asset Management will provide —
- A single-source-of-truth about the organization's operations, maintained in a centralized repository, that is easy for people in different roles to access and for groups to share
- A roadmap that links strategy with business outcomes, business groups with technology resources, and decisions with information
- Accurate as-is, what-if, and to-be scenarios that show the impact of change and the trade-offs of informed decisions

- Access to corporate-wide business processes, data, and information for divisions, business groups, teams, and individual employees

IT (information technology) resources are a jumble of legacy applications that have been kludged together over time. OT (operational technology) is tightly controlled and protected by operations resulting in missed data integration opportunities. The business is unable to access and use their valuable operational data.

Too much of the IT budget is spent on maintenance, with little left for innovation to support market opportunities. Without a long-term Asset Management plan (SAMP = Strategic Asset Management Plan) in place, business groups practice shadow IT, using their own resources and technologies without an eye on their mission-critical assets. The same applies to OT (operational technologies).

An architected approach to Asset Management will provide —
- IT-OT governance
- A complete view of technology resources to help IT and OT teams decide when to acquire, retire, update, extend, or merge technologies and integrate data to meet evolving organizational needs
- A plan to merge IT and OT platforms and applications, and integrate data

Step 3 Who are the stakeholders of your assets?

You know who approves your budgets and purchases. It's important to identify your internal stakeholders and find out what matters most to each of them. For example —

The average age of employees in a manufacturing plant is 55. It's important to capture and transfer their knowledge to younger employees who replace them as they retire. This transition presents an opportunity to renew business processes with best practices as new employees with fresh capabilities join the team.

The organization may estimate that business process improvements and knowledge transfer could produce $100,000 in savings because of faster new-hire training and improvements in business processes. However, uninterrupted manufacturing resulting from smooth and seamless knowledge transfer would be priceless to the Vice President of Operations.

HOW CAN YOUR ORGANIZATION GET THESE BENEFITS?
Capture employee knowledge
Model end-to-end operational business processes
Drive out hidden defects from business processes
Implement effective and efficient improvements

Another organization might have a jumbled IT ecosystem because of several mergers and acquisitions. The IT team knows there are many redundancies and old technologies, but they don't have a good grasp on what IT resources support which business groups. Worse, the general ledgers of the merged and acquired organizations will be different, meaning that the same things will be accounted for differently, a very difficult situation to resolve and align.

Streamlining IT assets would free up money. The CIO would consider this opportunity as priceless because his / her team could devote more time to innovation and an IT-OT strategy without daily IT maintenance headaches.

HOW YOUR ORGANIZATION CAN REALIZE THESE BENEFITS
Improve the way business is conducted = improve your customers' experience
Identify deployed applications and functionality
Model the technical infrastructure and architecture
Map the technology to business operations and business processes
Implement effective and efficient improvements

What is priceless to your stakeholders? It's usually a solution to a problem, not a specific type of technology or a tool feature or a report from a software system.

Step 4 What's your value statement?

Many try to sell a technology solution within an asset-intensive organization by framing it in the most important features and functions, while business leaders want to understand how it will advance their business goals. The two languages are dramatically different and communication is next to impossible. To be effective and have an impact we must speak the language of finance and business, not technology, to communicate with our senior management team and be heard.

Technology solutions are typically proposed within enterprises using the standard Features, Advantages, and Benefits (FAB) approach. But if you focus first on features, your pitch may confuse or bore an executive, especially one who doesn't have a technology background. He / she won't understand how these features will solve the problem. If you speak about advantages along with features, your executive may even think they don't apply to your organization's real needs.

Suppose you want a new car and you and your spouse have agreed to make major purchase decisions jointly. Let's say you want a Ferrari and you explain: "Because it is fast". But, your spouse doesn't care about a fast car and doesn't agree. So, you explain: "It will get me to and from work in less time". Again, no-sale because it doesn't matter to her that you spend less time commuting.

However, when you say: "This fast car will save me time getting to work and allow me to spend more time with you and the family", you've finally described the benefit, and possibly something priceless, to your decision maker.

How about using FAB statements in a new way to increase your success in getting buy-in from your budget decision makers? Begin with what matters most to them (Benefits and Advantages), then let them decide how much more detail they want (Features). This BAF approach works well when you're proposing an architected solution for Asset Management.

Using your organization's challenges, goals, and strategies, create a value statement for your decision makers and stakeholders using a Benefit-Advantage-Features (BAF), not Features-Advantage-Benefit (FAB), approach.

STEP 5 An architected approach to Asset Management drives Industrial Transformation

Executives want to see how other companies have used a similar approach to achieve success. Leading asset-intensive organizations are using asset performance to drive industrial transformation. Sharing stories about the achievements of others can help your executives develop confidence that your organization can reach the same level of success.

AN ARCHITECTED APPROACH TO ASSET MANAGEMENT will deliver priceless value to your stakeholders		
BENEFIT	The business will now …	Our organization will become agile in meeting rapidly changing market demands
ADVANTAGE	Because we can …	Because we have a comprehensive and holistic view of organization-wide operations, business processes, and resources, we now see how changes in one area affects others
FEATURE	Which is accomplished by …	By taking an architected approach to Asset Management, we capture operational data once and store it in a central repository where it is reused multiple times by different business groups

A few enterprise architecture success stories —

A consumer goods giant used enterprise architecture to drive a cost-optimization program, realizing $150 million in savings in just five years by transforming how the organization worked from idea to shelf.
The organization —
- Led an organization-wide digital transformation program that reduced time to market by 20+%
- Increased IT asset optimization by developing roadmaps for 3000 applications and related technologies
- Improved service delivery to internal customers by 75% in 7 years

The health insurer of choice for nearly 50 million people saved $50 million after three years of using enterprise architecture solutions. This industry leader streamlined operations, improved the customer journey, and enabled information sharing across all business lines.
The organization —
- Focused technology investments on capabilities that improved time-to-market
- Eliminated silos of information that divided business units
- Provided critical strategic and operational information through an employee portal that was viewed 25,000 times per month

A Fortune 50 insurance organization achieved a three-year ROI of more than 300% after using enterprise architecture and IT portfolio management solutions with 3000+ applications.
The total financial benefit to the organization was close to $15 million, including —
- Savings from consolidating applications, retiring legacy software, and reducing professional services ($10.6 million)
- Productivity gains from improved data collection and IT management ($1.1 million)
- Cost avoidance by identifying and mitigating risks ($3.2 million)

One of the largest US bank holding companies used enterprise architecture to generate savings of more than $15 million, gained from improved operations and fewer risks.
An architected solution allowed the organization to —
- Improve the customer experience by pinpointing business activities to automate, such as customer on-boarding, opening accounts, and customer service
- Remove hurdles to efficiency, such as business unit and data silos
- Eliminate costly redundant applications supporting similar capabilities by evaluating more than 600 applications and 1300 technologies, linking them with standards and capabilities

STEP 6 How does Asset Management demonstrate value?
How do you measure the value?

Some executives measure their organization's success in terms of dollar value; for example, sales revenue growth, profit margin, earnings per share. Others dive deeper and look closely at value by business unit, market share, or customer retention. Still others expect every program to deliver a measurable benefit.

WHICH BENEFITS WILL RESONATE WITH YOUR EXECUTIVES?	
Perspective	**Benefit**
Internal Business Processes	•Reduce OpEx •Less demand for CapEx •Extend the life of working capital •Improve reliability •Improve safety record •Deliver on time •Produce consistent quality products and services •Unlock capacity hidden in existing assets
Environment & Social	•Reduce emissions •Optimize energy consumption •Become a responsible corporate citizen
Learning & Innovation	•Link employee goals to the strategic objectives of the organization •Assess and update employee skills •Align Production and Maintenance •Cleanse and complete the asset register data •Converge IT-OT platforms

However your organization determines the value of investments, every budget request to the CEO and CFO will be compared with all others. Not all can be granted. Decision are made based on which budget request can be expected to deliver the most value to the organization within a given time period. It's important to show that the value Asset Management contributes to the bottom line can be measured in ways that —

- have meaning to your executives and decision makers
- connect strategy and operations in clear Line Of Sight
- do not overlap with other investments promising less clearly defined improvements
- deliver value quickly

BENEFITS OF AN ARCHITECTED APPROACH TO ASSET MANAGEMENT
Cumbersome processes replaced with effective, streamlined, repeatable end-to-end processes
Capabilities evolved to meet organizational needs
Problem areas identified, defects eliminated
IT-OT costs reduced by retiring obsolete, wasteful, and overlapping technologies
Value of strategic technology investments in the IT-OT landscape quantified

Putting It All Together

Now you have a good grasp on organization goals, your challenges, what's important to your internal stakeholders, a way to share the value of an architected approach to Asset Management with them, and how this approach can help your organization achieve its industrial transformation goals.

REALIZED VISION	
Financial	to ensure that we achieve our vision, while delivering on our mission
Customer	which drive excellent customer service ...
Business Process	enabling us to execute strategic actions ...
Environment & Social	work consciously …
Learning & Innovation	our people ...

Because you understand the measurable returns of an architected approach to asset management as well as the intangible values ... those priceless items ... you have the building blocks to create a compelling business case that will assist your organization's executives make informed decisions quickly and with confidence as they move forward into the future.

FORTIG — Our Asset Performance Accelerator

Fortig Inc. is committed to assisting asset-intensive organizations manage enterprise complexity by giving business leaders visibility into their organization and an interactive view of their operations. FORTIG, the Digital Twin of the Organization (DTO), unlocks value hidden in your existing physical assets. FORTIG is a platform that provides visibility into the way business is conducted plus measures to track performance. It provides the information business leaders need to make the right choices for effective governance and strikes a balance among innovation, cost optimization, and risk management.

FORTIG connects the C-suite to the shop floor using an operational excellence strategy that links strategy to execution. Business leaders have visibility into the way business is conducted along with trace-ability and line-of-sight. With this inside-out perspective, leaders are able to make informed decisions with confidence.

As an example, alerts generated by shop floor sensors are captured by FORTIG to be investigated and categorized in the daily production meeting as repair, accident, non-conformity, non-compliance, incident, etc. then assigned to the appropriate role for resolution. The alert is assessed by severity along with the potential business impact within the boundaries of risks the organization is willing to take and manage.

FORTIG is powered by QualiWare's enterprise architecture and business process modelling technology platform (qualiware.com). FORTIG is a Living Management System designed for collaboration and continuous improvement, boosting business agility in today's disruptive environment. It's a game changer.

Asset Performance Accelerator

fortig.com