

Understanding and Establishing Appropriate Behaviours for Effective Asset Management

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Taking cognitive psychology into account when developing asset management policy and procedures represents innovative and transformative approach. Industry sector feedback suggests that such considerations are highly significant to the effectiveness and sustainment of good asset management practices. The incorporation of psychology promotes creative thinking, operates cross-functionally, is industry-agnostic, and actively encourages diversity of thought. This innovative intersection of psychology and asset management is gaining recognition for its potential to bring fresh perspectives and enhance overall effectiveness.

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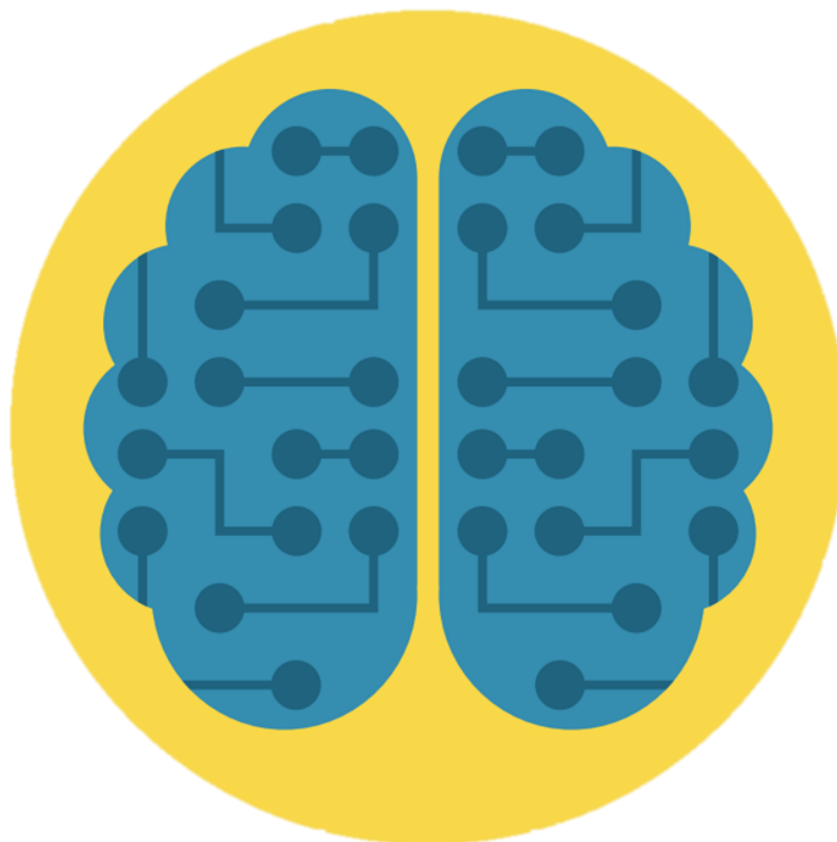
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INTRODUCTION

Current Asset Management Strategies and their Limitations

My research into the behavioural dimensions of Asset Management took shape as I was researching and writing my PhD [1]. I realised that there was a real gap in the training continuum of engineers and that there was a lot of assumed knowledge. Therefore, I wrote a research paper [2] that explored the evolution of engineering decision making, and then incorporated the philosophy and psychology of engineering decision making. One of the unique contributions of the paper was the generation of a table of cognitive biases which engineers are susceptible to (Annex A).

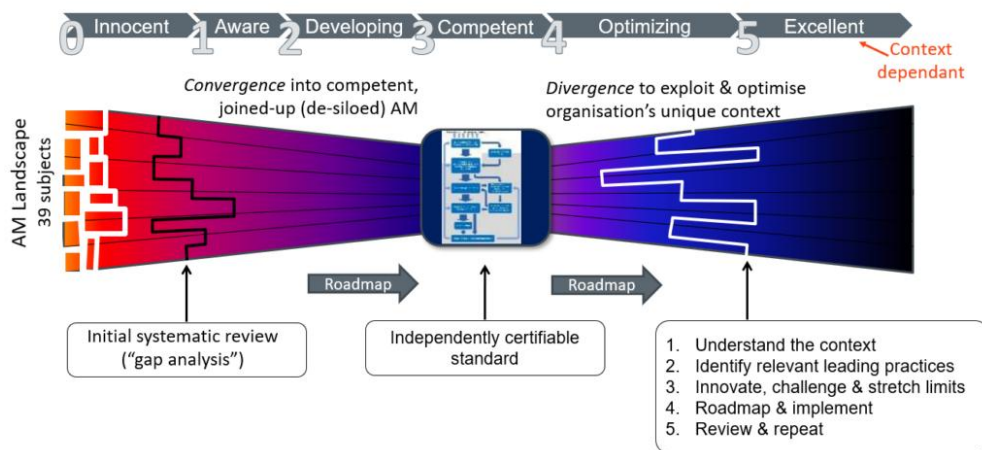
To embed cognitive psychology in asset management policy and procedure is unconventional yet innovative. Industry sector feedback to date suggests that it is a highly appealing, novel area for many, due to the fact it promotes creative thinking, is cross functional, industry agnostic and actively encourages diversity of thought.

Principle 1 - *Align with the functional capabilities required for Asset Management.*

Good asset management requires a continuous system of assurance (Fig 1). Alignment with ISO 55001 should be the minimum standard sought by organisations, because achieving the ‘best possible value’ from assets manifests differently from one organisation to another.

Alignment to the Asset Management System (AMS) is critical to ensure delivery of organisational strategic objectives and values. A tailored pragmatic approach is required in Auditing and Assessment to deliver useful and relative insights set within the context and goals of the organisation. Everyone needs to know their role in the achievement of the organisation’s asset management objectives.

In Australia, Federal Government policies appear to be increasingly aligned to industry leading practice, which includes the ISO55000 suite of standards. For example, the shift from CAPEX and OPEX planning to a TOTEX whole of life value proposition, drove NSW State Government to mandate the alignment to ISO55000, through TPP19-07 [3]. The standard provides guidance on how to implement an effective AMS, though it only describes the minimum standard organisations should achieve. A “competent” grading provides a foundation from which to work, but organisations should continue to improve and seek excellence in asset management.



Maturity Scale:

0	1	2	3	4	5
Innocent	Aware	Developing	Competent	Optimizing	Excellent
Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Beyond	
The organization has not recognized the need for this requirement and/or there is no evidence of commitment to put it in place	The organization has identified the need for this requirement, and there is evidence of intent to progress with it	The organization has identified the means of systematically and consistently achieving the requirements and can demonstrate that these are being progressed with credible and resourced plans	The organization can demonstrate that it systematically and consistently achieves relevant requirements set out in ISO 55001	The organization can demonstrate that it systematically and consistently optimizing its asset management practice, in line with the organization's objectives and	The organization can demonstrate that employs the leading practices and achieves maximum value from the management of its assets in line with the organization's objectives and

Figure 1: The Institute of Asset Management (IAM) maturity scale [4]

Principle 2 - Asset Management Maturity

An issue that is often confused when talking about asset management maturity is whether we are talking about the maturity of an organisation’s Asset Management System, or the maturity of its overall asset management capabilities and performance as shown in Fig 1.

To explore this requires understanding of the distinction between the AMS and broader discipline of asset management. There are two resources which can assist with understanding and implementing good practice in these matters: (a) ISO 55001 [5], which defines requirements of a suitable Management System (Fig 2); and (b) the Institute of Asset Management (IAM) 10-box Conceptual Model for Asset Management (Fig 3). The latter is designed to describe the overall scope of Asset Management and the ten broad subject groups of activity within this discipline.

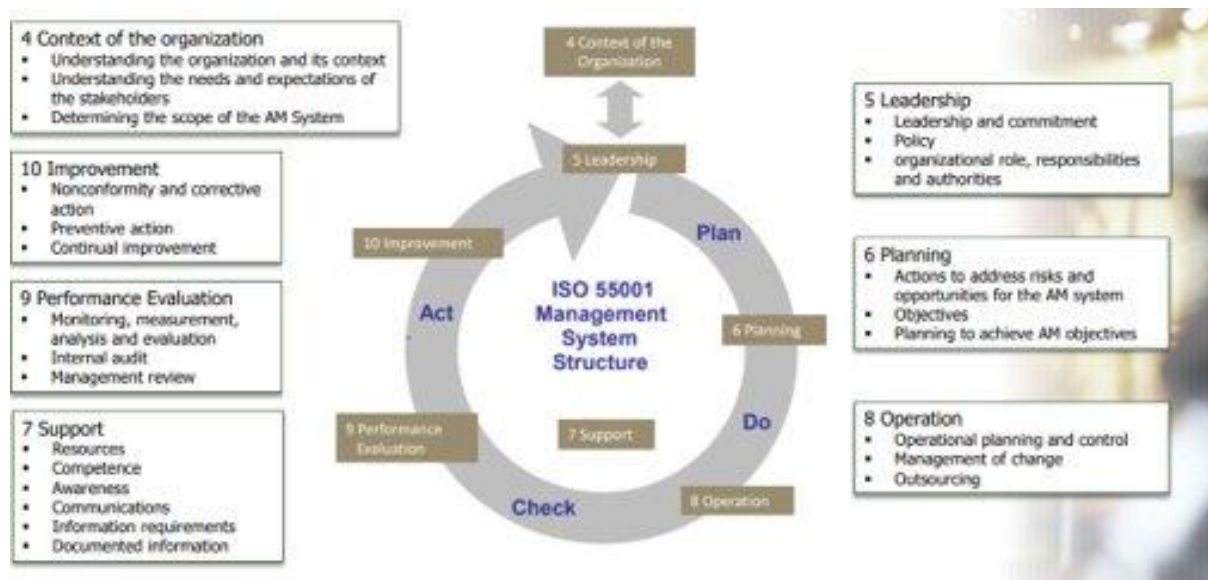


Figure 2: ISO 55001 Management System Structure [5]

Focussing in on the *Organisation and People* from the IAM 10-box Conceptual Model for Asset Management (Fig 3) below, we can see that it directly influences *Information Management* (Purple), *Asset Management Decision-Making* (Green), *Strategy and Planning* (Yellow), and *Leadership and Governance* (Blue). This is because the impact of asset management, and how it is perceived, is significantly shaped by the organisational structure and culture. This encompasses the definition of good practices, the perceived scope for change, individual behaviour, and the level of commitment to goals and objectives. Organisational structure refers to the arrangement of individuals within a company and the groupings in which they operate. Culture, on the other hand, is a social construct denoting the shared understanding of work, values, attitudes, or beliefs that are believed to influence long-term behaviour and performance. The organisational structure can exert a substantial influence on the organisational culture, and conversely, the culture can shape the structure. It is incumbent upon each organisation to determine the most suitable combination of structure and culture that aligns with its specific needs.

Further granularity is achieved through aligning to the 39 asset management landscape subjects that underpin asset management competency. This enables the identification of skills gaps that

can be closed through the upskilling of knowledge, skills and demonstrated proficiency to ensure competency coverage across the whole landscape.

The conceptual model of IAM underscores the notion that Asset Management involves the integration of various activity groups rather than viewing them in isolation. Moreover, it underscores a crucial point: Asset Management is designed to align with and serve the overarching goals of the organisation.

The IAM produces Subject Specific Guidance (SSGs) for each of the 39 subjects. Specifically, SSG 28 and 29 [6] focus on Organisational Structure and Culture, offering asset management practitioners guidance in assessing current organisational structures and cultures, and contributing to change initiatives. This guidance addresses the significance of organisational structure and culture, delves into key principles applicable within an asset management context, and provides insights into the evaluation of existing structures and cultures, as well as contributing to change programs. While it effectively addresses the "how" aspect of these processes, there remains a gap in the organisational understanding of the fundamental "why" behind the necessity to undertake these evaluations and participate in change programs in the first place.



Figure 3: The IAM 10-box Conceptual Model for Asset Management [4]

The implementation of a structured approach is imperative for achieving both efficiency and excellence in the development and widespread adoption of analytics solutions. The importance of the 'people' factors is recognised and explained in the imminent new standard, ISO 55012 - People Involvement and Competence. This standard, due for publication this year, offers guidance on engaging individuals within an organisation's asset management system and enhancing their involvement and competence within it. The primary objectives of ISO 55012 are as follows:

- Establish a good asset management culture, cultivate peoples' awareness of asset management, and support for achieving organisational strategic goals;
- Provides guidelines for human factors which influence people involvement and competence and creates value that helps to achieve the organisation's objectives;
- Provides guidelines for an organisation's asset management system to achieve outcomes which are consistent and aligned with their strategies and values;
- Identify, develop and evaluate the knowledge, skills, behaviour and work environment required for the effective involvement of people with the necessary competence;
- Enhance the people involvement and competence to provide support for the establishment, implementation, maintenance and improvement of asset management system.

The consideration of behavioural influences is relevant to all elements of the IAM conceptual model for Asset Management (Figure 3), the ten high-level subject groups of activities, and their alignment with the 39 asset management landscape subjects that serve as the foundation for asset management competency. This framework intricately explores the strategic alignment of talent and leadership, business processes, and the entirety of the human terrain.

The Science of Business Management - *the evolution of modern management approaches*

Taylor [7], the pioneer of scientific management, brought about a paradigm shift in the 20th century by introducing scientific principles for organising patterns and disciplines within project management. His methods, rooted in scientific analysis, treated human labour as discrete entities, sparking discussions about automating and mechanising workers while limiting their capacity for individual initiative and reflection. Ford and the concept of "Fordism" furthered this perspective by viewing people as integral components in a mechanised system.

Scientific management focused on profit maximisation through the controlled use of workers, incorporating training, monetary incentives, and managerial oversight. However, it faced substantial criticism for its short-term profit orientation and the dehumanisation of workers, resulting in negative long-term performance outcomes. This led to a shift towards behavioural studies, incorporating social factors to address challenges overlooked by Taylor's method.

The evolution of technology and globalisation prompted a modern management approach that seeks to adapt and complement scientific management by acknowledging the human factor and its contributions within an organisation, rather than outright replacing traditional methods.

Consequently, contemporary project management models, while emphasising productive activities and the completion of defined tasks, place significant value on employee contributions and feedback at all levels [7].

Human Beings are Creative and Complex

Human beings are inherently creative and complex, yet these characteristics are often overlooked in our planning, communication, and leadership approaches. Unconscious assumptions guide our actions and are not aligned with the reality of complex adaptive systems and the intricacies of human creativity. Moreover, the structures of typical organisational systems tend to reinforce authority bias.

The challenges faced by organisations, such as communication breakdowns, decision-making hurdles, leadership gaps, and difficulties in sustaining change, are not unique and can be attributed to flawed assumptions rooted in Taylorism and Fordism.

The legacy of Taylorism and its influence on modern organisational structures perpetuates flawed assumptions that shape how operating environments are structured, managed, and led. This framework neglects the importance of involving the workforce in solution-oriented approaches by fostering shared awareness of the system.

In a multifaceted discipline like Asset Management, isolating the key elements that contribute to overall effectiveness can be challenging. Applying systems thinking, whether in a closed or open system context, becomes essential. Using a medical analogy, viewing an individual as an assembly of limbs, organs, muscles, and nerves does not fully capture the complexity of a person, including their capabilities, health, and longevity. Similarly, in Asset Management, which operates as an open system with crucial interactions with the environment, variabilities arise, particularly in terms of diversity of thought and experience.

PROPOSED IMPROVED APPROACH

The culture of asset management often diverges from the way the average person naturally thinks and makes decisions. A distinct contrast exists between the evidence-based analytical methodologies employed by engineers and the intuitive or heuristic processes commonly utilised by the general public [1].

While both approaches can be suitable in their respective contexts, making incorrect choices based on them can lead to undesirable and, at times, severe consequences. To ensure that recommendations from engineering analyses are accepted by non-technical decision-makers, it is crucial to present the findings in a manner that takes human factors into account.

Successful engineers are not just subject matter experts, they are also skilled in translating the technicalities of their discipline into the language and visualisations accessible to other communities and broader society. A key skill in this regard is consequential reasoning, which plays a pivotal role in enhancing the persuasive power of analytical findings. Such visualisation and communication skills are core elements of structured approaches to behaviour, culture and collaborative relationships (such as the BAMTM methodology¹). Such methods go beyond conventional approaches by integrating structured learning in communication, socio-cultural understanding, emotional intelligence, and cognitive psychology. Special emphasis is placed on epistemology, particularly in relation to bias and false logic. This holistic approach equips individuals with the skills needed to bridge the gap between technical analysis and effective communication in the broader social context.

¹ Behavioural Asset Management; see appendix xx

McKinsey's 7-Ss

Prior work in this field includes the "7-Ss" framework (Fig 4), which McKinsey introduced in the 1970s. The 7-S framework aimed to emphasise the crucial role of coordination, rather than structure, in organisational effectiveness [8]. During its introduction, the 7-S framework was revolutionary in assessing organisational effectiveness. As discussed earlier, Taylorism and Fordism directed managerial focus towards organisational structure—defining roles, reporting structures, and so forth. However, as organisations evolved in size and complexity, the pivotal question shifted towards that of coordination.

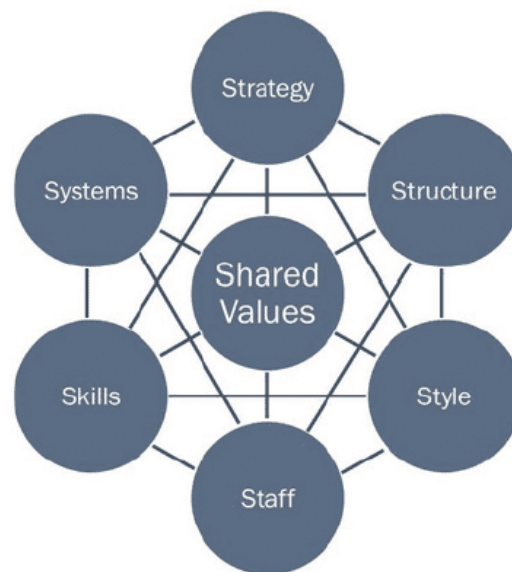


Figure 4: McKinsey 7-S Framework

The 7-S framework offers a model that incorporates a network of interrelated factors for evaluating organisational change. These seven areas are considered equally important, devoid of hierarchy, and altering one area is believed to impact all others. Placed at the centre are shared values, signifying that a company's core values are integral to all aspects of its operations.

- **Strategy** involves an organisation's approach to their industry sector, including its plans and actions to create growth and profits
- **Structure** pertains to how a company organises and structures its resources, from capital, budgets, workforce, equipment etc.
- **Systems** are the processes and workflows carried out as a part of the work responsibilities and the tools used to accomplish the work.
- **Shared Values** are the organisation's core values that ties everything together, where all aspects of the organisation operate under the same set of values.
- **Style** comes from the informal rules of an organisation, essentially the culture of a company and how it does things.

- **Staff** are the employees of the company, and how each employee develops and grows in their roles.
- **Skills** are those of individual employees as well as the skills of the organisation as a whole. The organisation would have its core competency but can also outsource when needed.

Strategy, Structure, Systems and Shared Values are considered “*Hard Ss*” as they are easier to define, and where management has more ability to control, influence, and apply change to these areas.

Style, Staff and Skills are considered “*Soft Ss*” as they are harder to define, and a company’s culture will have a strong influence in how these areas are shaped.

Integral Theory

Integral Theory (Fig 5), articulated by the contemporary American philosopher Ken Wilber, serves as a comprehensive philosophical map that unifies over 100 ancient and contemporary theories spanning philosophy, psychology, contemplative traditions, and sociology. In contrast to aiming to establish a singular correct viewpoint, Integral Theory strives to provide a framework for comprehending and appreciating the perspectives of various theories and philosophical traditions. Its primary objective is to elucidate the interrelationships among these perspectives and foster an understanding of their collective relevance [9].

The four-quadrant grid has two axes, namely "internal-external" and "individual-collective." The left side (internal) mirrors the individual development from structural stage theory, and the collective mutations of consciousness:

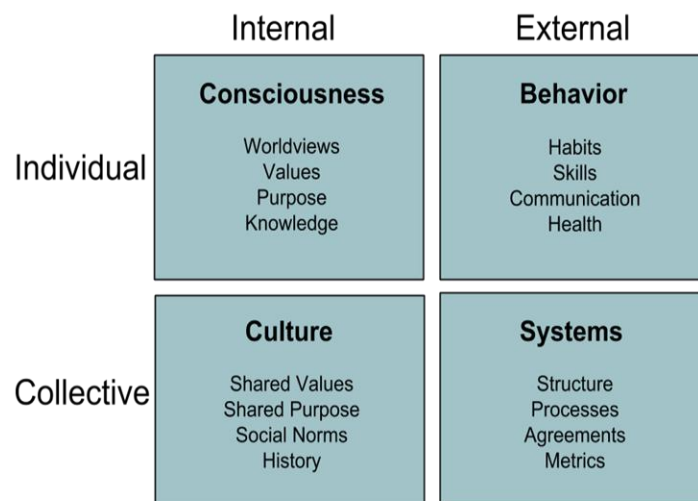


Figure 5: Integral Theory was developed by Ken Wilber in the 1970s [10].

- Interior individual perspective (upper-left quadrant) describes individual psychological development, as described in structural stage theory, focusing on "I";
- Interior plural perspective (lower-left) describes collective mutations in consciousness, as in Gebser's theory [11], focusing on "We";

- Exterior individual perspective (upper-right) describes the physical (neurological) correlates of consciousness, from atoms through the nerve-system to the neo-cortex, focusing on observable behaviour, "It";
- Exterior plural perspective (lower-right) describes the organisational levels of society (i.e. a plurality of people) as functional entities seen from outside, e.g. "They" [10].

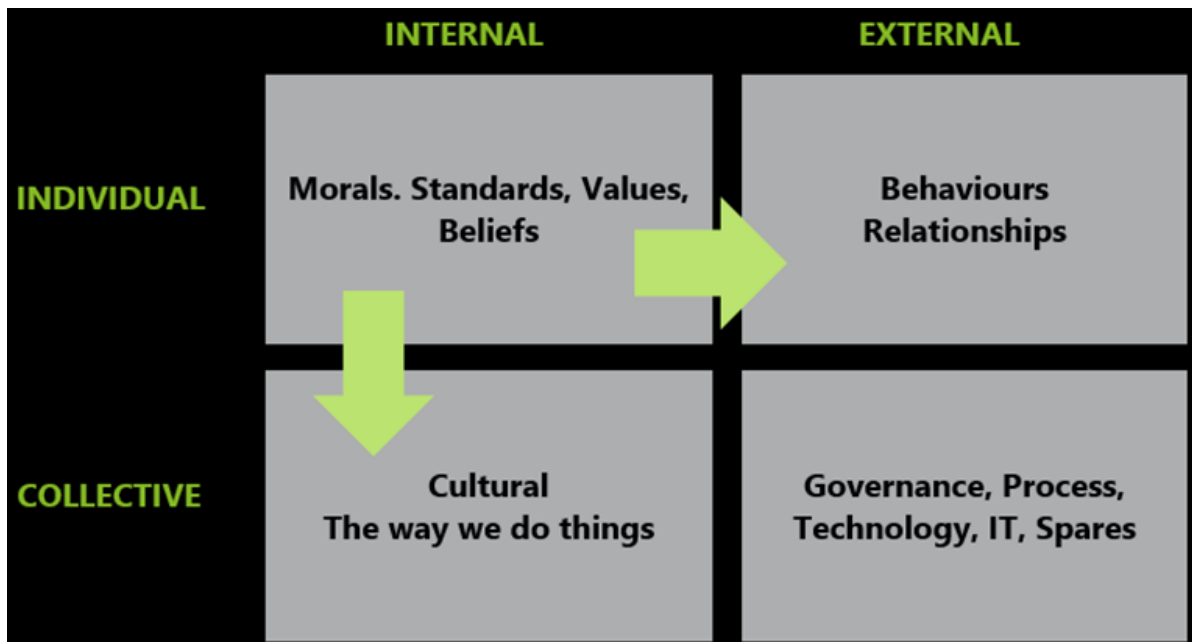


Figure 6: The effect individual internal has on individual external and internal collective.

In the most straightforward terms (Fig 6), our personal morals, values, and standards not only impact how we engage with each other on an individual level, shaping personal relationships, but also collectively as a group, influencing the overall culture we embody as a collective entity.

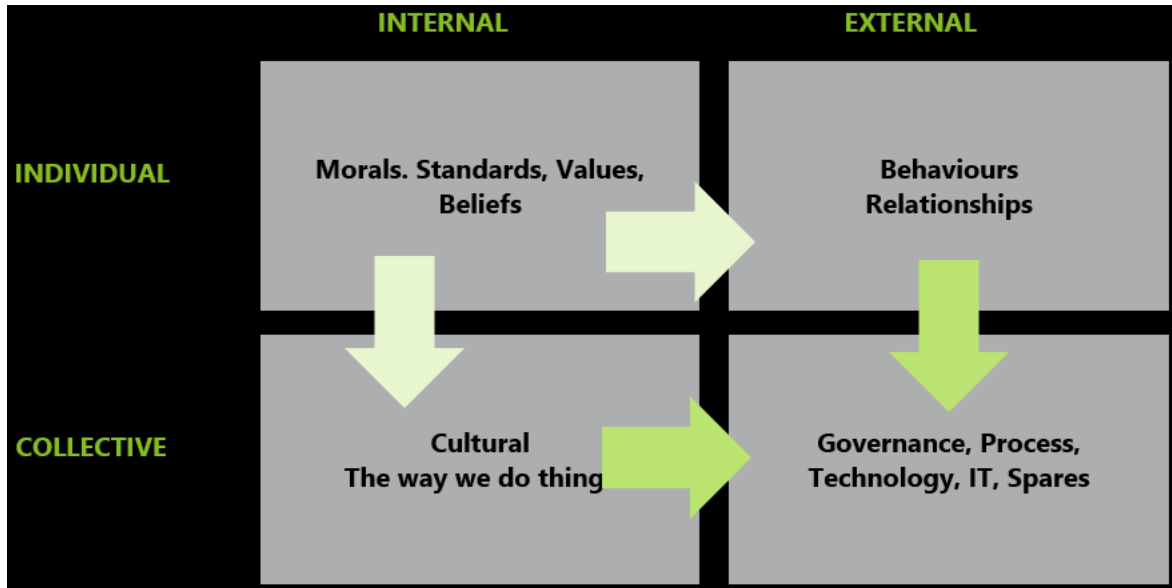


Figure 7: The convergence of culture and relationships influences our collective external persona.

This convergence of culture and relationships (Fig 7) ultimately shapes our collective external persona, evident within an organisation as the 'rules for working'—encompassing governance, processes, procedures, and more.

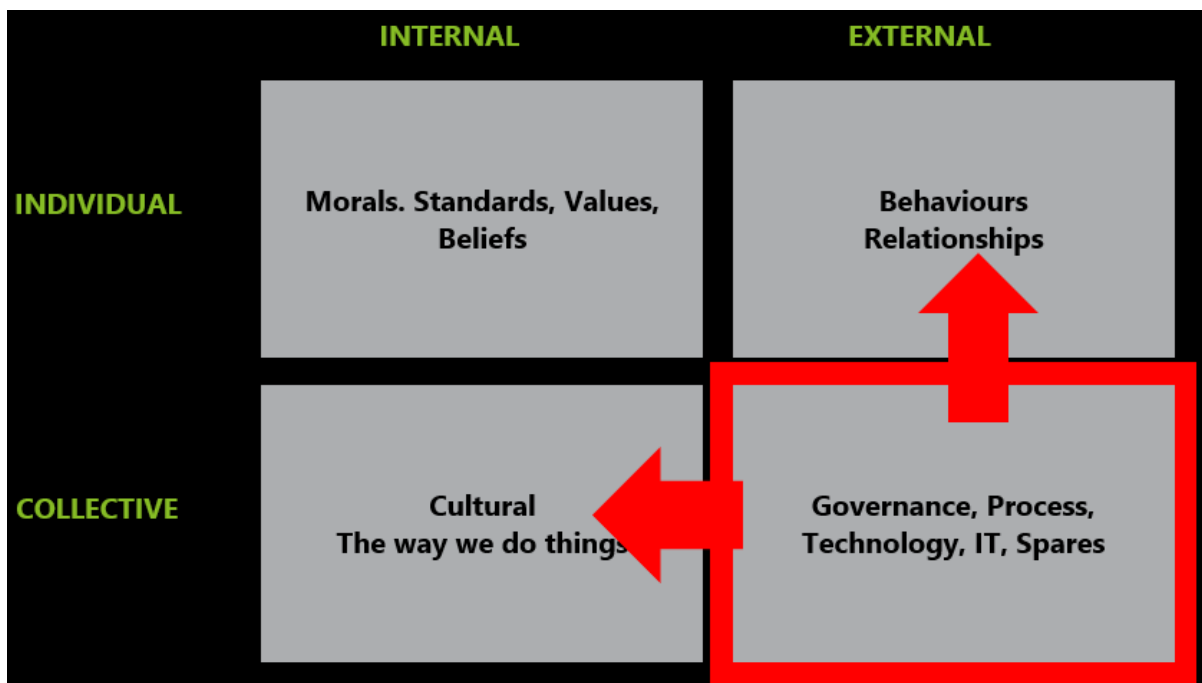


Figure 8: Corporate Governance drives corporate culture and individual behaviour.

In organisational systems, all four quadrants operate concurrently, mutually influencing each other. However, organisations often emphasise the right-side quadrants—visible elements—while neglecting the examination of the "invisible" components that drive these outward manifestations, such as the development of processes, policies, and behaviours.

Intervening in a system effectively requires addressing each quadrant. Yet, it is through a meticulous investigation of the key elements within the External Collective (Fig 8) that we can overcome entrenched processes and systems, fostering the necessary behavioural changes to ensure lasting impact on future decisions.

Failure to adhere to collective externals (Fig 9) may indicate a cultural issue related to behaviours, stemming from both individual relationship dynamics and a departure from the positive company culture. Moreover, individuals whose morals, values, and standards diverge culturally from the company can have a detrimental effect on organisational culture and morale, influencing individual relationships and resulting in a decline in work ethic.

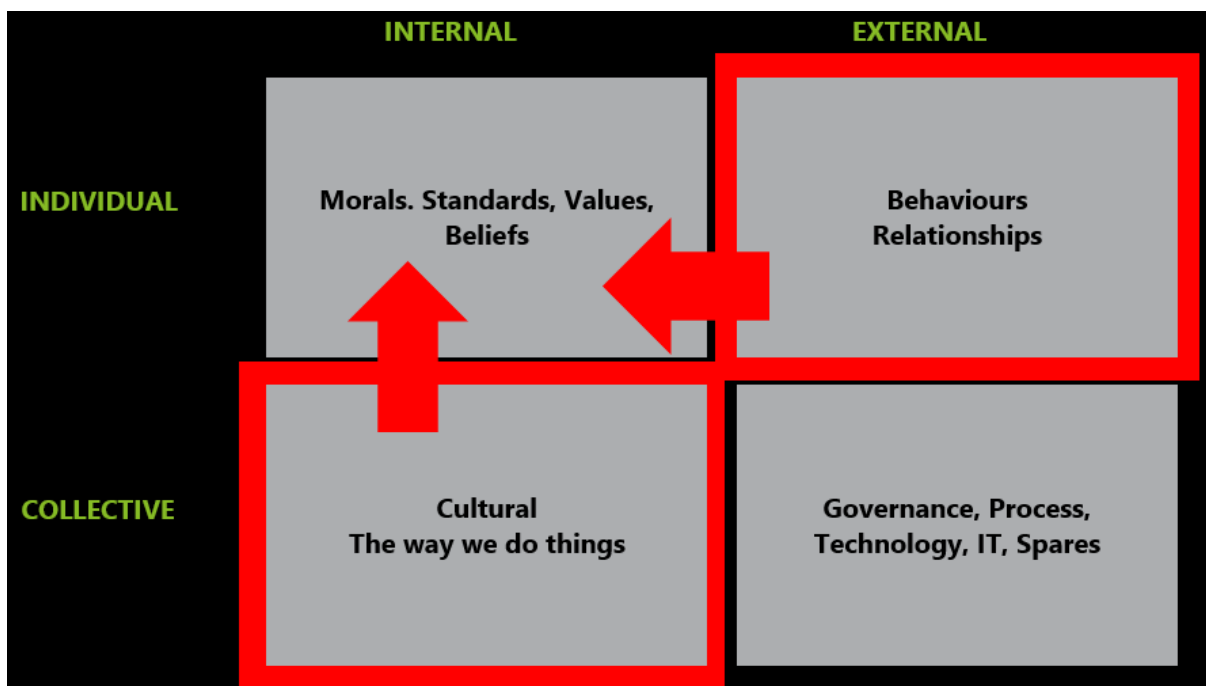


Figure 9: Misaligned individual morals, values and standards manifest as poor work ethic.

THE CHALLENGE

Cognitive Engineering

Cognitive engineering is the application of cognitive psychology and related disciplines to the design and operation of human-machine systems. Developed as an engineering method in the 1970s at Bell Labs, it employs multiple methods and perspectives to enhance system performance. This approach concentrates on how individuals construct a cognitive model of a system using common metaphors. Situated within the broader field known as 'human factors' in the United States or 'ergonomics' in Europe, cognitive engineering is dedicated to enhancing

systems effectiveness, safety, and the productivity of the human components within the system [1].

Cognitive Biases

The cognitive process of decision-making involves choosing from various alternative options, yet the original set of choices may be influenced by the decision-makers' pre-existing views. Factors like insufficient information, a lack of time, or emotional resources can impede the ability to make optimal decisions.

In the formation of opinions and the selection of courses of action, mental processes blend reason with bias. Bias, as defined by the American Psychological Association, is a general pattern or tendency to think in a certain way. While some habitual thinking patterns serve as useful mental shortcuts, honed over years of experience for quick and automatic decision-making, most biases, unlike heuristics, lead to errors and distort our perception of reality.

Prejudice, such as stereotyping, pertains to what we think, while cognitive biases relate to *how* we think. These are ingrained patterns of thinking often poorly grounded in evidence or logic, resulting in inaccurate conclusions. Although not exhaustive, Annex A provides a list of key cognitive biases that are particularly relevant to engineering decision-making [1].

Embracing Industry 5.0: A Human-Centric, Technology-Enabled Future

Industry 5.0 marks a significant evolution by explicitly emphasising a "human-centric, technology-enabled" approach. This new paradigm not only leverages advanced technologies but also prioritises human collaboration, creativity, and well-being. By integrating human intelligence and ingenuity with cutting-edge innovations, Industry 5.0 aims to create more sustainable, resilient, and inclusive industrial systems. This approach ensures that technological advancements serve to enhance human capabilities and foster a more balanced and equitable relationship between technology and society.

Becoming Human Centric

Being "human-centric" refers to the philosophy, approach, or design principle that prioritises the needs, preferences, and experiences of human beings in various processes, systems, or interactions. Whether applied to product design, service delivery, or problem-solving, being human-centred involves understanding and empathising with the end users or recipients of a particular solution.

In a human-centred approach, the focus is on designing solutions that are intuitive, user-friendly, and responsive to the actual needs and desires of individuals. This often involves gathering feedback, conducting user research, and iteratively refining designs based on user input. The goal is to create products, services, or systems that enhance the overall human experience, fostering satisfaction, usability, and positive outcomes.

Being human-centred is particularly emphasised in fields such as user experience (UX) design, customer-centric business strategies, and various forms of problem-solving methodologies. By placing humans at the core of the design and decision-making processes, organisations aim to create more effective, meaningful, and sustainable solutions that genuinely meet the needs of their intended audience.

In the realm of Behavioural Science, every workplace is essentially regarded as a behaviour factory [12], operating as a production line generating behaviours. Positive behaviours involve individuals fulfilling their commitments, and there are various levers that can be utilised to influence behaviours, including:

- Key Performance Indicators (KPIs) / Key Health Indicators (KHIs)
- Mission Statements
- Organisational Structures
- Values
- Hierarchy
- Environment

Negative behaviours lead to obstacles, but strategic interventions can cultivate positive behaviours. Examples of strategic interventions include:

- Implementation of a formalised Decision-Making Framework, clearly defining the roles, responsibilities, processes and decision-criteria for company-wide decision-making, to establish the consistency, transparency and credibility of decisions.
- Development of a Strategic Communications Plan that identifies key stakeholders, facilitating targeted messaging and transparent reporting at regular intervals.
- Creation and dissemination of a Golden Thread, establishing a clear top-down and bottom-up alignment between executive direction and 'front line' tasks and activities.. This alignment can be measured through Key Performance Indicators (KPIs) and Key Health Indicators (KHIs) indicating lead and lag performance.
- Red Teaming, involving an entity designed to operate and think like the customer or client, facilitating robust 'wargaming' to uncover unknown issues affecting company performance.
- Training in problem-solving and decision-making tools and techniques, such as Kepner Tregoe (KT) and the SALVO Process².

IAM Competencies Framework

The IAM Competency Framework (Fig 10) contains a unified set of generic competence requirements that apply to all organisations and sectors whose business performance relies on asset management. It applies to people in asset management roles from any sector. The current Competencies Framework identifies seven key roles:

1. Policy development
2. Strategy development
3. Asset management planning
4. Implement asset management plans
5. Asset management capability development
6. Risk management and performance improvement
7. Asset knowledge management

² Strategic Assets Lifecycle Value Optimisation. www.SALVOproject.org

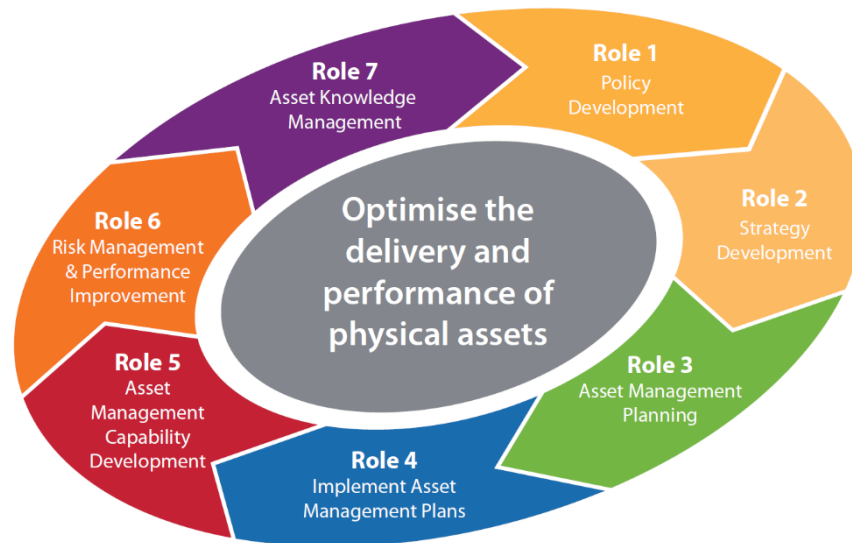


Figure 10: The IAM Competency Framework

Assessing the current situation

If we scrutinise the current IAM's Self-Assessment Methodology Plus (SAM+) tool, designed to assess the current state of maturity across all aspects of the Asset Management landscape, it becomes apparent that the questions related to the "people" aspect are present but lack specificity. This implies that an organisation can achieve compliance with the 'Competent' level of maturity (e.g. ISO 55001 certification), yet fall short in addressing the right Asset Management behaviours that help to ensure effectiveness and continuity. The current assessment tool lacks depth in the following areas:

- Process
- Data
- Technology
- Decision-Making
- Collaboration
- Performance

In each of these areas of beneficial expansion, the behavioural aspects are particularly significant.

The *behavioural* focus in these topics increases attention to:

- Adherence and alignment to **process**;
- Accuracy, pride, understanding and rigour in **data** management, focussing on the pride, understanding and rigour required;
- Using **technology** as an enabler;
- Effective **decision-making**, focussing on the need for escalation/delegation, process adherence, 'ownership' and consensus-building;
- Organisational **collaboration**, including at the personal levels; and
- Enhancing **performance**, not just personal productivity, but as well as asset and corporate.

Identifying the need for a systematic approach to behavioural factors

The process of aligning and shaping asset management behaviours for optimised outcomes encompasses various phases. The first phase involves acknowledging the necessity for a structured approach, which may be prompted by independent expert review of the needs or the use of a self-assessment tool³. Some indicative indicators from such assessments include:

1. Process:
 - Incomplete or improper execution of processes by staff.
 - Lack of awareness of how individual tasks fit into the end-to-end flow of processes.
 - Comprehensive, consistent, and scalable processes are essential, but success requires adherence to both the process and its intent.
2. Data:
 - Inaccurate or incomplete input of data leading to poor data quality.
 - Absence of an integrated Data model with effective data governance and accountability.
 - Transformation of analytics requires a cultural shift beyond data and technology.
3. Technology:
 - Underutilisation of new systems, such as SAP or Oracle, due to staff sticking to old manual workarounds.
 - Efficient adoption of technology is crucial for streamlining processes and making existing ways of working more efficient.
4. Decision-Making:
 - Ineffective use of available data, failure to account for contextual factors, and neglect of de-biased approaches.
 - Uniform decision-making models are in place, but inconsistent decision-making, in processes, competencies and data usage.
5. Collaboration:
 - Silos and lack of information sharing between teams.
 - Senior leadership may not understand or show interest in highlighted issues or opportunities.
 - Effective collaboration is essential to drive cross-departmental accountability and governance.
6. Performance:
 - Supervisors or superintendents not effectively leading their teams.
 - Teams not improving or sharing lessons learned.
 - Simplifying complexity around asset management metrics is crucial for optimising performance.

Identifying these indicators underscores the need for a comprehensive approach to behaviour change, as many of the existing behaviours are deeply ingrained and contribute to the organisational culture. Changing these behaviours requires a strategic and sustained effort, as they are often deeply rooted and embedded in the organisational DNA.

³ E.g. BAMPlus, ref..xxx

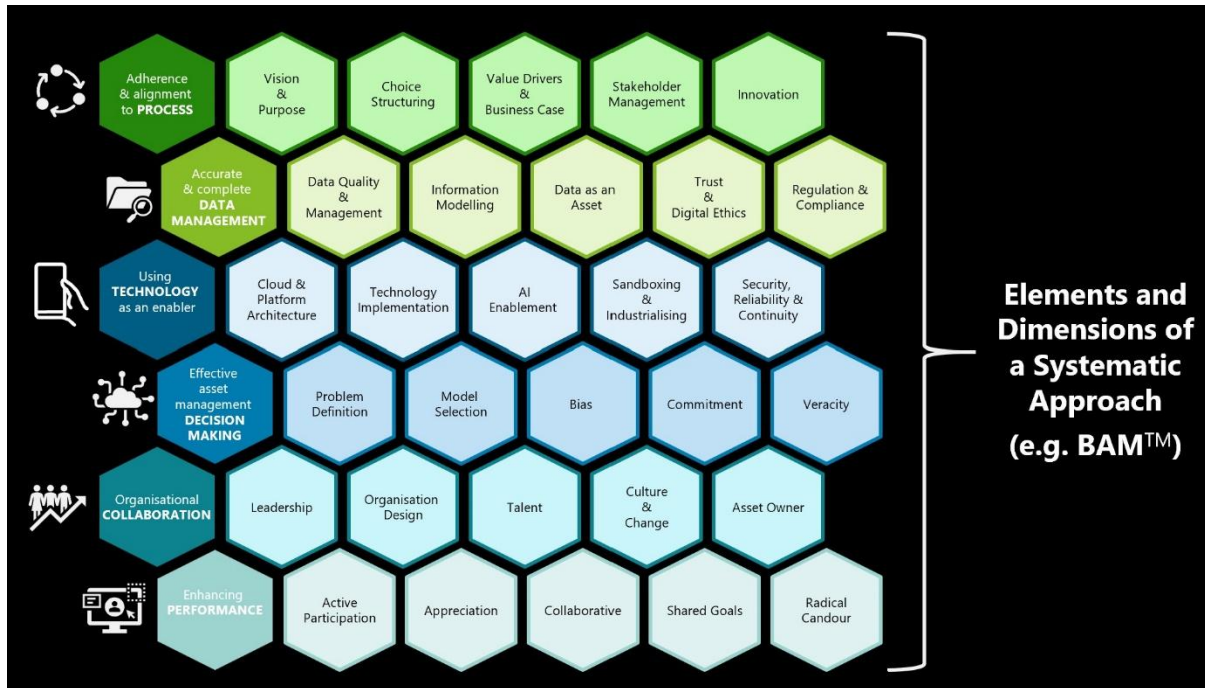


Figure 11: The BAM™ Activity Matrix

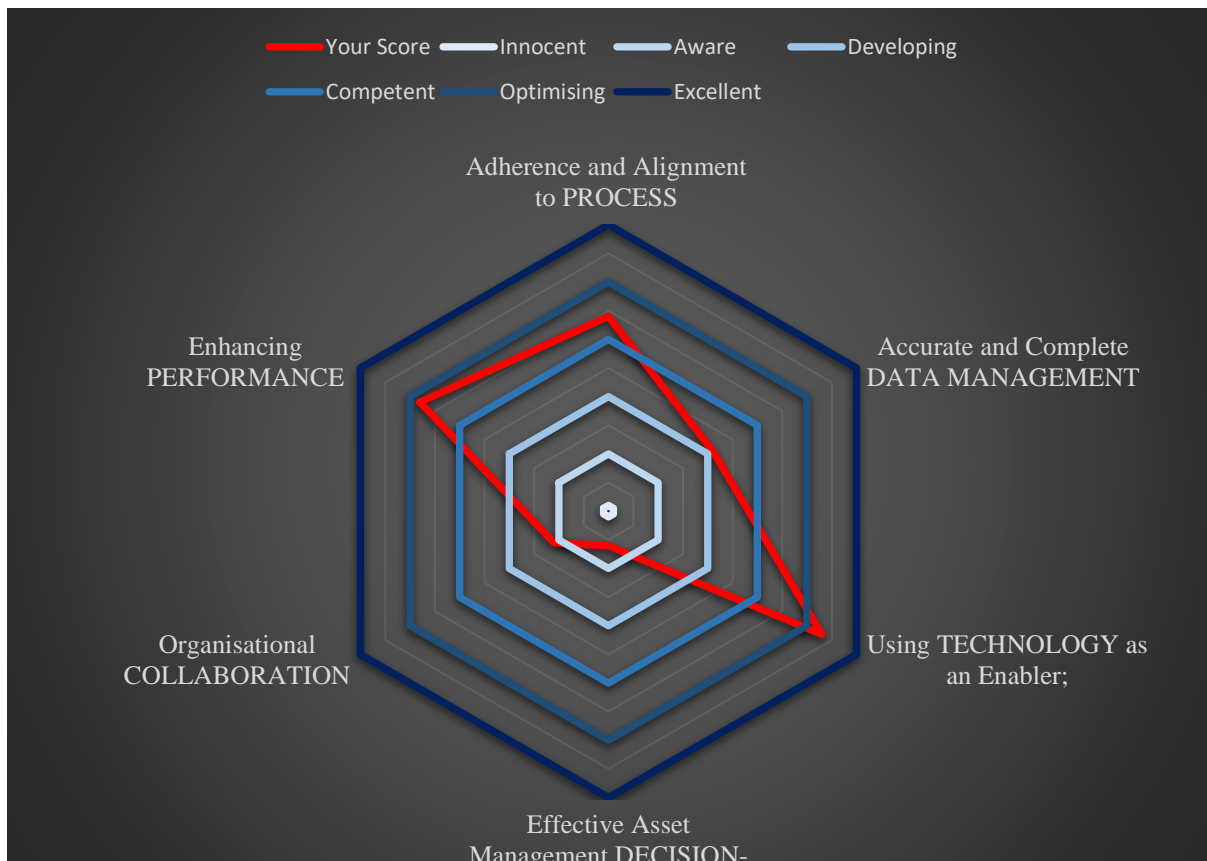


Figure 12: BAMPlus™ Self-Assessment Tool data visualisation

Nevertheless, as apparent in the strategy outlined above, behavioural attention alone cannot address all the company's issues. However, it can substantially enhance the likelihood of success by fostering behavioural changes and paving the way for long-term, sustainable change.

Table 1 outlines essential behaviours along with indicative actions and outcomes, aiding in delineating the company's current and desired future states.

Table 1: Behaviours, Actions and Outcomes

BEHAVIOUR	ARE YOU TAKING THE RIGHT ACTIONS?	ARE YOU DELIVERING THE RIGHT OUTCOMES?
Process Driven Behaviours	<p>Do your processes support individual and team objectives and aspirations?</p> <p>Do our processes foster the development of sustainable groups?</p>	<p>Do you have the right technical talent and training to create and present usable processes?</p> <p>Is your organisation empowered to make decisions based on research-backed techniques of process development and presentation?</p>
Data Driven Behaviours	<p>Is the most suitable data being selected to inform useful decision-making?</p> <p>Is the most fitting type of analysis being applied to allow for gathering usable insights and removing subjectivity?</p> <p>Are insights being used to re-engineer, augment and improve business processes?</p>	<p>Is there a culture of using data to answer business questions and inform decision making?</p> <p>Are insights delivered to enhance the brand experience for your organisation?</p> <p>Are the insights relevant to all the corresponding end-users?</p>
Technology Driven Behaviours	<p>Are your processes intelligently optimised?</p> <p>Are ethics and privacy concerns addressed within your processes?</p>	<p>Do you have the right blend of business and technical skills to identify, develop and embed intelligent solutions?</p>

	Are the end-users able to see the value of the technologies they are being asked to adopt?	Do your intelligent solutions cater for dispersed employees, customers and assets?
Decision-making Driven Behaviours	Do you have an ideation process? Do you have a sandbox environment for rapid development?	Are you using new insights to continuously enhance the products and services you offer? How do you ensure lead time remains competitive?
Collaboration Driven Behaviours	Do you have the appropriate design authorities in place to make organisation wide changes? Are you integrating ethics, security and support into your development capabilities? Are you incentivising groups that promote right behaviours?	Are there sufficient resources with the right skills to deliver at scale? Do you have strong relationships across the business to monitor, understand and adapt to business need?
Performance Driven Behaviours	Do you know what outcomes you want to manifest? Do you know what it will take to achieve those outcomes? Does everyone on the team share the vision that will drive performance?	Is the solution appropriate to the diagnosis? Are there any other potential solutions and have you outlined why this solution and not the others? Is the group on board?

MEASURING SUCCESS

How can we recognise and measure success?

Recognition and measurement of success helps provide clarity about the goals and objectives one is striving to achieve. Clearly defined goals enable organisations to work towards specific outcomes and measure the value of the initiative, known as Return on Investment (ROI). To define "what good looks like," companies must establish Key Business Objectives (KBOs) that drive value. Demonstrating the value of behavioural asset projects can be challenging, often due to three root causes:

1. **Misalignment with Business Needs:** Projects may not address specific business questions or align with organisational needs.

2. **Lack of Adoption:** Even well-executed projects may not be adopted into Business As Usual (BAU) processes, hindering their impact.
3. **Unrealistic Expectations:** Setting unrealistic expectations regarding results, timelines, outputs, or user experience can lead to difficulties in showcasing ROI.

Measuring ROI involves mapping value drivers to behavioural improvement tactics, providing leaders with a clear line of sight between employed tactics and quantifiable metrics contributing to a positive impact on the company's bottom line. Fig 14 illustrates this mapping, emphasising that collective success in various value drivers ultimately drives overall value. Key Performance Indicators (KPIs) or Key Health Indicators (KHIs) play a crucial role in measuring and defining success. Simply put, companies need to ask, "Is it measurable, and have we improved?" to ascertain what good looks like.

Success Indicators

Success indicators encompass both tangible and intangible aspects. While Key Performance Indicators (KPIs) effectively track tangible performance drivers, it's acknowledged that they may fall short in measuring intangible ones. The concept of Key Intangible Performance Indicators (KIPs) suggests that these intangible aspects are pivotal for organisational success [13]. Therefore, it's recommended that senior leadership integrates both KPIs and KIPs into the success strategy to gain a comprehensive understanding of overall performance. The four critical KIPs identified—leadership, innovation, reputation, and employee satisfaction—play a significant role in organisational success, and structured approaches, such as BAM™, directly contribute to their achievement. *Table 2* provides indicative success indicators aligned with these principles.

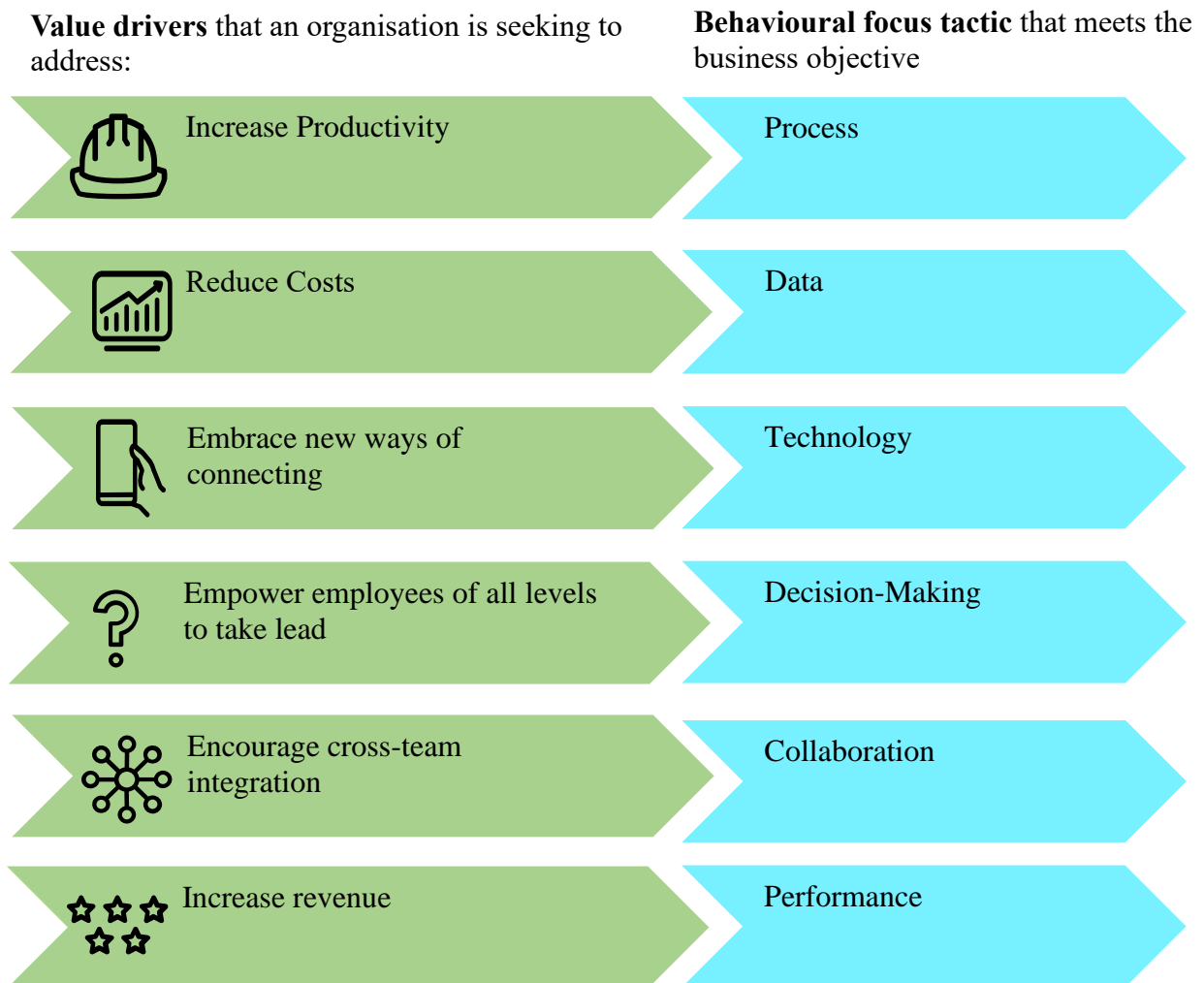


Figure 13: Value Drivers and Behavioural focus Tactics

Table 2: Success Indicators

CATEGORIES	SUCCESS INDICATOR	EXAMPLE BEHAVIOUR
Leadership	How leaders think; how this shapes our strategic priorities and impacts all levels	Leaders develop team members risk management toolkits to work comfortable with uncertainty & manage ambiguous situations, then delegate decision-making processes on them.
Influence and Decision Making	The way key relationships are developed and how people win support for decision making processes without using position	People work together seamlessly with colleagues from all different areas of the organisation
Rituals and Routines	Daily rituals and routines of people that signify acceptable behaviour. Sets	Leaders establish a ‘drum beat’ whereby a regular cadence of established

	norms for given situations, defines what's valued by management	meetings occur, such as 'safety shares' or 'tool box talks'
Stories	What we talk about inside and outside the organisation. Our vision, strategy, stories, customer insights: our history. Who and what we choose to immortalise says a lot about what we value	Some of these may be urban legend, but some go on to be major contributors to establishing the culture of the company
Symbols	Visual and physical representations of the organisation through its workplace, including branding, work environment, office layout, meeting spaces, and dress codes	More than a log, a company motif can be represented by its scent, like hotel chains, or through their company clothing or style, which can be seen at its uniform. Casual laid-back style works for Google
Processes and Systems	The way we run the business. These include financial systems, technology systems, quality systems and rewards (including the way they are measured and distributed) within the organisation	People leverages technologies & challenge current practices to stay ahead of the competition. Each person understands the value of sharing knowledge - successes and failures.
Structures and Informal Networks	The formal and informal relationships for how work is managed/gets done. Defined by both the organisational chart and influence/relationship networks.	People uses practices and business routines to communicate effectively with a diverse talent pool; integrating business and industry know-how, with analytics and AI.

Barriers to Success - Challenging the Status Quo

Embarking on a BAM™ journey requires a keen awareness of potential resistance and the need for extensive organisational education and change, as illustrated in the case study above. Altering learned behaviours within the company is crucial for the success of any strategic implementation plan. Below is a summarised breakdown of behavioural changes impacting operational capability:

- **Cultural Change:**
Overcoming stove-piping and empire-building mentality is crucial for fostering collaboration. Cultivating a positive culture is essential.
- **Communication and UX:**
Simplifying jargon and improving user experience are vital for ensuring that the value and insights from analytics and AI are effectively communicated and utilised.
- **Inaccurate Metrics & Models:**
Establishing accurate metrics, avoiding oversimplified models, and promoting data-driven decision-making are essential to prevent knee-jerk reactions.

- **Technical Perception:**
Bridging the gap between technical complexity and understanding is necessary for effective utilisation of tools and technologies.
- **Talent Crunch:**
Addressing the shortage of data analyst and data scientist talent requires strategic hiring and leveraging decision support tools.
- **Data Confidence:**
Ensuring consistent definitions, promoting data sharing, and providing timely access to meaningful data are critical for informed decision-making.
- **Customisation Complexity:**
Avoiding unnecessary complexity by exploring off-the-shelf solutions from the market can enhance productivity.
- **Siloed Implementation:**
Encouraging enterprise-wide integration and breaking down silos in analytics development is essential for efficient use of resources.
- **Buy-in Challenges:**
Overcoming challenges related to ROI discussions, change inertia, skepticism, and fear is crucial for obtaining leadership buy-in.
- **Tackling Jargon:**
Simplifying corporate buzzwords and breaking down complex concepts into easily understandable components is essential for organisational comprehension.

Effecting change in these areas is paramount for a successful journey, ensuring alignment with organisational goals and strategies.

Moving up the maturity scale

Following the identification of specific development areas through structured assessment, the next crucial step involves impartially quantifying your organisation's position on the maturity curve. This assessment aims to determine the strategy required to ascend the curve effectively.

The behavioural asset management Maturity Curve is characterised by three levels of granularity:

- *Organisational*: Involves aspects like the management system, corporate values, and culture.
- *Human Centric*: Encompasses personal behavioural standards, consistency, collaboration, communication, and leadership.
- *Decision-making*: Focuses on capabilities related to technical, analytical, consensus-building, authorisation, ownership, and delivery behaviours.

Behavioural maturity in asset management addresses both decision-related capabilities and delivery behaviours. The latter involves the "doing" aspects, requiring appropriate behaviours, de-biasing, collaboration, and the avoidance of self-interest and short-term bias. To successfully advance up the maturity curve, there must be a comprehensive understanding of

both tangible and intangible decision and delivery behaviours across decision-making, human-centric, and organisational layers (Fig 15).

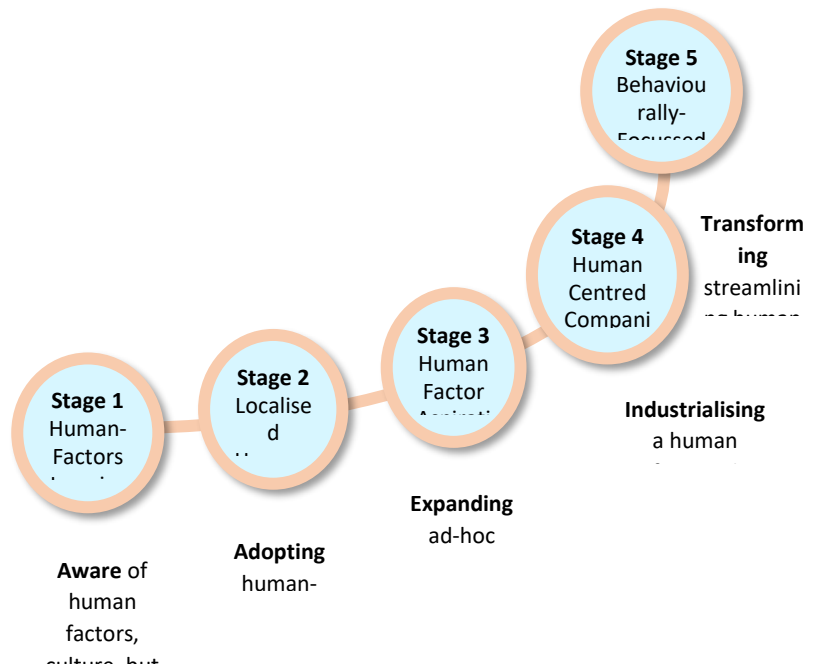


Figure 14: The BAM™ Maturity Curve

Making it Sustainable

May (2016) suggests a five-step methodology utilising scientific insights to effectively influence both individual and group mindsets and behaviours. This methodology ensures that your strategy for addressing human factors is operationally effective and sustainable:

- 1. Be Ambitious and Articulate the Case for Change:**
 - Ground the behavioural change effort in a clearly articulated ambition.
 - Maintain focus on the final outcome and articulate why behavioural change is essential for achieving the vision.
- 2. Know Your People:**
 - Identify subgroups where small changes can have a significant impact.
 - Use analytical segmentation to understand personality, behaviours, mindsets, and socioeconomic factors.
 - Identify key influencers, unconscious biases, and risk factors unique to each subgroup.

3. Tap into 'Moments of Truth':

- Identify discrete points in time (moments of truth) where choices strongly influence the desired outcome.
- Follow an individual through a life cycle or experiential journey to pinpoint core moments of truth.
- Specify the concrete behaviour to trigger at each moment and understand underlying mindsets.

4. Target Your Interventions:

- Select a package of actions, interventions, and enablers for each priority segment.
- Adopt a systems approach that considers influencers and the overall ecosystem.
- Utilise McKinsey's influence model, focusing on role modelling, population understanding, talent and skills, and formal reinforcement mechanisms.

5. Size the Prize:

- Estimate the social return on investment (SROI) for each package of interventions.
- Compare the SROI to the budget required for implementation.
- Evaluate the effectiveness of interventions based on their impact on desired behavioural changes [14].

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Annex A – List of Cognitive Bias [1, 2]

BIAS	DESCRIPTION	EXAMPLES / CONSEQUENCES
Anchoring Bias	The human tendency to be over-reliant on the first piece of information heard or recalled.	Particularly prevalent in diagnostics, the analyst’s first impressions of the case often create an anchoring point, which can sometimes incorrectly influence all subsequent diagnostic assessments due to a vital piece of information being overlooked.
Authority Bias	The tendency of people in a hierarchical system to make decisions based on what their leaders say, or what they guess their leader would think, even if they believe the leader to be wrong.	Often referred to as Sunflower Bias due to the fact that a person will go along with what the boss says, rather than having confidence in their own knowledge and experience, because they feel their leader ‘must know better’
Availability Bias	People overestimate the importance of information that happens to be available to them, reverting to immediate examples that come to mind when evaluating a specific topic, concept, method or decision.	An untruth repeated often enough is eventually perceived as a truth. People tend to heavily weigh their judgments toward more recent information, making new opinions biased toward the latest news
Backfire Effect	The Backfire Effect causes people who encounter evidence which challenges their beliefs to reject that evidence, and to strengthen their support of their original stance.	A subtype of Confirmation Bias. When a person encounters information suggesting that their current beliefs are wrong in some way, they feel threatened, generating a variety of negative emotions. This is especially likely when the beliefs in question are crucial to the person’s self-concept, hence representing an important part of their identity and ideology
Bandwidth Effect	‘Bandwidth’ describes the brain’s capacity to perform functions that underlie higher-order behaviour and decision-making. When bandwidth is taxed, less is available for use in other judgements or decisions, leading to potentially undesirable choices	The brain operates on a two-system model: System 1 is the intuitive, automatic and effortless portion, which is prone to biases and errors; System 2 can produce accurate and unbiased results but is slower, more deliberate and effortful. Decreased bandwidth reduces the probability that a person can use their System 2 processes when making decisions, hence reverting to the less reliable System 1
Belief Bias	If a conclusion supports one’s existing beliefs, anything that supports it will be rationalised.	This can happen when an observer assumes ahead of time that they know what the results of an experiment will be and as a consequence of that belief distorts the observations.
Blind Spot Bias	Failing to recognise one’s own cognitive biases.	Cognitive or motivational biases are much more readily recognised in others than in oneself.
Bounded Awareness	Cognitive blinders prevent a person from seeing, seeking, using, or sharing highly relevant, easily accessible, and readily perceivable information during the decision-making process.	Most decision-makers are not aware of the specific ways in which their awareness is limited, nor of the consequences of this failure to recognise those limitations. Bounded awareness can occur at various points in the decision-making process: 1. Decision-makers fail to see or seek out key information needed to make a sound decision; 2. They fail to use the information that they do see because they aren’t aware of its relevance; or 3. They fail to share information with others, thereby bounding the organisation’s awareness.

Bounded Rationality	Decision makers seldom have the time or mental processing power to follow the optimisation process outlined by decision analysts, so they suffice with shortcuts and accept the first satisfactory course of action rather than continuing to search for the best.	Choosing a restaurant when hungry compared to choosing a restaurant for an upcoming major social event.
Certainty Effect	When people overweight outcomes that are considered certain relative to outcomes that are merely possible.	People prefer a 100% discount on a cup of coffee every 10 days to other more frequent but lower discount offer, even though the second option may save them more money in the long run.
Champion Bias	The tendency to evaluate a plan or proposal based on the track record of the person presenting it, more than on the facts supporting it.	Instrumental in the power of social media ‘influencers’.
Choice Overload	A cognitive process in which people have difficulty making a decision when faced with many options.	Too many choices might cause people to delay making decisions or avoid making them altogether.
Confirmation Bias	The tendency to search for, interpret or listen only to information that confirms one’s preconceptions, leading to statistical errors.	When people would like a certain idea to be true, they end up believing it to be true. They are motivated by wishful thinking.
Curse of Knowledge Bias	Once you understand something, you presume it to be obvious to everyone.	Similar to Hindsight Bias, this can explain why communication games such as Charades or Pictionary may end in a stalemate between communicator and guesser. To the communicator it is obvious to what they are miming or drawing, but less obvious to the guesser.
Decision Fatigue	After a long session of decision-making or repetitive decision-making tasks, people’s mental resources are drained, therefore they tend to take the easiest choice (e.g., maintaining the status quo), resulting in a lower quality of decisions being made.	Researchers studied parole decisions made by experienced judges and found that the chances of a prisoner being granted parole depended on the time of the day that judges heard the case. 65% of cases were granted parole in the morning and fell dramatically with accumulating hours of a session. The rate returned to 65% after a lunch break, then fell again.
Declinism	Declinism is remembering the past as better than it was and expecting the future to be worse than it is likely to be. Socrates is reported to exclaim that the written word would be the downfall of information dissemination, and more recently the same has been said about the internet.	When things change, so must the way in which we think about them; and because we are cognitively lazy (Kahneman, 2011; Simon, 1957), we try our best to avoid changing our thought processes.
Dunning-Kruger Effect	People who are ignorant or unskilled in a given domain tend to believe they are more competent than they are. They therefore lack	A nationwide survey found that 21% of Americans believed that it was ‘very likely’ that they would become millionaires within the next 10 years.

	the competence to recognise their incompetence.	
Experience Bias	We take our perception to be the objective truth.	We assume our view of a given problem or situation constitutes the whole truth.
Framing Effect	Being unduly influenced by context and delivery, people react to a choice in different ways depending on how it is presented i.e., as a loss or as a gain.	People tend to avoid risk when a positive frame is presented but seek risks when a negative frame is presented. For example, people are more likely to enjoy meat labelled 75% lean meat as opposed to 25% fat.
Fundamental Attribution Error	Tendency to over-emphasise dispositional or personality-based explanations for behaviours observed in others, while discounting situational explanations.	Particularly relevant to forensic investigations, because investigators have a cognitive bias to assume that a person's actions depend on what 'kind' of person they are rather than on the social and environmental forces that might influence them.
Group Think / Herd Behaviour	The tendency to go with the crowd, explaining the probability of one person adopting a belief increasing with the number of people who hold that belief.	Allowing the social dynamics of a group situation override objective evidence or probable best outcomes. When it turns negative, it can be a "mob mentality."
Hindsight Bias	The tendency of people to overestimate their ability to have predicted an outcome that could not possibly have been predicted. Can result in oversimplification of cause-and-effect.	After the global financial crisis of 2007, many analysts stated that all the signs of the financial bubble had been plain to see.
Loss-aversion Bias	People are more likely to select an option that is measured in units of success rather than failure, as the pain of losing is psychologically about twice as powerful as the pleasure of gaining.	Often observed in medical situations when the chance of success is presented as a survival rate rather than as a mortality rate. Linked to Ratio Bias.
Myside Bias	When people evaluate evidence, generate evidence, and test hypotheses in a manner biased toward their own prior opinions and attitudes.	Similar to Confirmation Bias. The biases are most prevalent with emotionally significant issues and for established beliefs. For example, in reading about gun control or abortion, people usually prefer sources that affirm their existing attitudes. They also tend to interpret ambiguous evidence as supporting their existing position.
Negativity Bias	Allowing negative things to disproportionately influence one's thinking.	The pain of loss and hurt are felt more keenly and persistently than the fleeting gratification of pleasant things.
Optimism / Pessimism Bias	One overestimates the likelihood of positive or negative outcomes.	Pessimism bias could make someone believe that they will fail an examination, even though they are well-prepared and likely to succeed. Vice versa for optimism bias.
Projection Bias	The tendency of people to overestimate the degree to which other people agree with them. People tend to assume that others think, feel and believe much like	Shopping when hungry results in tendency to buy unhealthy foods one does not normally eat, and larger quantities than normal. This not only increases costs but results in storage of unwanted goods. At the time of

	they do. Also influences our estimations of our future selves.	shopping, we incorrectly anticipate that our future hunger will be as great as at present.
Ratio Bias	People’s difficulties in dealing with proportions or ratios as opposed to absolute numbers.	In a study, participants rated cancer as riskier when it was described as killing 1,286 out of 10,000 people than when described as killing 24.1% pf people, despite the fact that the latter is actually a much higher risk. The finding demonstrates that ratio bias can strongly influence perception of risk. In a similar study, participants rated the statement “36,500 people die from cancer every year” as representing higher risk than the statement “100 people die from cancer every day”.
Representativeness Bias	People tend to judge the probability of an event by finding a ‘comparable known’ event and assuming that the probabilities will be similar.	When people rely on representativeness to make judgments, they are likely to judge wrongly, as the fact that something is more representative does not actually make it more likely.
Self-Serving Bias	The belief that our failures are due to external factors.	We attribute successes and positive outcomes to our own merits and initiative, but attribute failure and negative outcomes to other people or contextual factors outside ourselves.
Status Quo Bias	A subconscious preference for continuing with the way things are, rather than initiating change, even when there is evidence indicating that the change will be of benefit.	Participants in a retirement plan were given the option of changing the distribution of their investments every year at no cost. Yet, despite varying rates of return among different options, only 2.5% of participants changed their distribution in any given year. When asked why they never changed their plan distribution, participants were often unable to justify their preference for the status quo.
Sunk Cost Fallacy Bias	Irrationally clinging to things that have already cost you something.	The tendency of people to irrationally follow through on an activity that is not meeting their expectations because of the time and/or money they have already spent on it. For example, the Concord aircraft.

Appendix 1

Behavioural Asset Management (BAM) Methodology

The BAM™ Activity Matrix

BAM™ stands out as a structured approach, crucial for attaining both speed and quality in the development and widespread adoption of analytics solutions on a large scale. What sets BAM™ apart is its comprehensive approach, extending beyond technology considerations. It encompasses strategic alignment, talent and leadership, business processes, and the holistic understanding of the entire Human Terrain within an organisation. Notably, BAM™ places emphasis on the "soft Ss," concentrating on the impact on Shared Values, highlighting the significance of cultural elements in the successful implementation of analytics solutions.

CASE STUDY – A NATIONAL INFRASTRUCTURE COMPANY

SITUATION

The state-owned Micronesian national infrastructure company has faced a sustained decline over the last 13 years. Geopolitically, the company mirrors the characteristics of a heavily unionised, government-funded entity, leading to significant misappropriation of resources. This misallocation is evident both in terms of excessive headcount in administrative roles and the mishandling of funds allocated for assets and contracts. Applying McKinsey's 7S model allows for a rapid identification of the key organisational issues and challenges:

Strategy:

- Lack of a coherent and effective strategy for sustainable development and growth.
- Strategic goals not aligned with the broader national infrastructure needs.

Structure:

- Overgrown administrative structure resulting in inefficiencies and resource mismanagement.
- Inadequate alignment of organisational structure with strategic objectives.

Systems:

- Ineffective financial management systems contributing to misappropriation of resources.
- Absence of robust systems for monitoring asset funding and contract management.

Skills:

- Workforce facing a skills gap, hindering the successful execution of infrastructure projects.
- Insufficient training programs for employees to enhance their skills.

Staff:

- Excessive headcount in administrative roles leading to resource misallocation.
- Challenges related to unionisation impacting workforce productivity and flexibility.

Style:

- Leadership characterised by a lack of accountability and transparency.

- Absence of a proactive and adaptive leadership approach to address organisational challenges.

Shared Values:

- Misalignment between organisational values and the broader national interest.
- Lack of a shared vision that unites the workforce toward common objectives.

The application of a structured analysis pinpoints critical areas that require attention and intervention. However, it is the behaviours, learned and ingrained over many years, that need to be changed in order to ensure a sustainable improvement. Addressing these issues strategically can pave the way for the revitalisation and sustainable growth of the company, aligning it more effectively with national goals and interests.

Strategy

The absence of an effective corporate strategy is a notable challenge. While overarching Government initiatives outline long-term targets related to national development and decarbonisation, the translation of high-level strategic intent into the company's 15-year plan is lacking. Essential unifying purposes are missing, and there is a lack of clear articulation regarding activities aligned with regulations, policies, strategies, corporate governance, or national initiatives.

The existing annual rolling three-year Corporate Plan is perceived as a bureaucratic administrative task, viewed more as a hindrance than an opportunity to shape the company's direction and future operations. The corporate goals outlined are deemed unrealistic, serving more as political appeasement, and the underlying assumptions are considered delusional. Completion of the current corporate plan was delayed until quarter 3 of the current financial year, rendering any operational, growth, or revenue goals agreed upon unattainable.

Crucially, there is a lack of a 'Golden Thread' connecting high-level Government strategic intent to the day-to-day tasks performed by the company. This absence of a clear line of sight for employees, from individual daily tasks through management-led initiatives to executive operational milestones and Board directives intended to meet national targets, indicates a deficiency in adherence and alignment to established processes.

Structure

The recent structural review lacked a focus on functional and physical requirements, resulting in a futile exercise. The intent to reduce headcount for financial savings was ineffective, erasing gapped positions without realising savings. Restructuring contracts of management, albeit removing union membership, did not result in substantive savings due to retained entitlements.

Decades of unchecked union influence, even up to CEO levels, created a leadership structure heavily influenced by the union. This led to frequent strike threats, hindering any attempts by the Board to redirect the company. The union's influence has eroded efficiency and effectiveness, transforming leadership into a popularity contest. Attempts to turn the company around faced resistance through slavish adherence to HR policies, particularly those influenced by the union.

Systems

The heavily unionised nature of the company contributes to laborious processes, reliance on hard-copy documentation, and resistance to digital transformation. Procurement requisites require numerous signatures and take an average of 16 days, reflecting bureaucratic inefficiency. Attempts to implement electronic workflows face internal resistance.

Operational inefficiencies extend to minimal data management, lack of performance measurement, and reluctance to adopt technology. Health Usage Monitoring Systems (HUMS) remain underutilised, partly due to a lack of competency and a prevailing attitude avoiding performance measurement. Absence of electronic attendance logging and payroll linkage conceals a significant loss to the company, a situation maintained due to union and leadership resistance to change.

The lack of defined metrics and key performance indicators (KPIs) from the Government, coupled with authority bias, results in a company-wide absence of measurable targets. The company's reluctance to adopt technology hampers effective data management, hindering asset management decision-making.

Shared Values and Style

Shared values, as articulated by the company, are not embodied. A prevalent attitude of "It's not your company, so why care about the cost?" permeates all departments, reflecting a lack of accountability and interdependency. Financial lapses, such as failure to pay storage charges for critical spares, highlight a lack of discipline and accountability. Punctuality and discipline are lacking, adversely affecting operational effectiveness.

A toxic work environment discourages best effort through obnoxious aggression, rewarding ruinous empathy and manipulative insincerity. Senior leadership's unwillingness to address these issues and make necessary changes contributes to a pervasive leadership void.

Staff and Skills

The absence of a proper functional requirement review hampers understanding of physical requirements, leading to a mismatch between functional and physical structures. A lack of competency mapping results in an ill-fitted workforce, with misaligned technical competencies and an absence of training and mentoring programs for organic growth. The shutdown of the internal training college contradicts a commitment to professional development.

A lack of collaboration results in stove-piping, with a hubris C-suite attitude and empire building. Misallocation of staff in positions without the required competencies hinders the company's ability to grow and progress. Organisational collaboration is lacking, and the company faces stagnation and organic degradation due to misaligned structures and a workforce mismatched to corporate requirements.

COMPLICATION

It is evident that the company has many challenges and issues, most notably:

1. Lack of Asset Management Understanding:
 - The company doesn't perceive itself as an asset management entity, lacking awareness of key metrics for performance and effectiveness.
 - Monopoly status diminishes the motivation to measure success or adopt preventative maintenance measures.
2. Reactive Approach:
 - Reactive, knee-jerk responses are prioritised over proactive measures, leading to recurrent asset failures.
 - The absence of a preventative maintenance culture contributes to ongoing issues with assets.

3. **Financial Mismanagement:**
 - A welfare mentality coupled with a unionised sense of entitlement has led to a culture of financial mismanagement.
 - Decades of Government financial abuse and micromanagement have left the company financially, morally, and conceptually bankrupt.
4. **Negative Cashflow and Insolvency:**
 - The company is trading insolvent, consistently spending more (about 30% weekly) than it generates in revenue.
 - Inability to pay bills or creditors, coupled with negative cashflow, indicates a dire financial situation.
5. **Lack of Leadership Grasp:**
 - The leadership lacks an understanding of the severity of the company's situation.
 - Inability to comprehend the challenges contributes to the company's spiraling condition.
6. **Political Interference:**
 - The company operates under political puppetry, responding primarily to Ministerial complaints.
 - Political interests prevent an honest acknowledgment of insolvency and hinder necessary interventions.
7. **Geopolitical Sensitivities:**
 - Geopolitical and strategic sensitivities prevent international agencies from privatising or turning around the company.
 - Donor agencies support the government to avoid civil unrest, creating a complex geopolitical situation.
8. **International Donor Support:**
 - The company relies on international donor agencies to sustain operations.
 - Geopolitical considerations necessitate external support to prevent potential civil unrest with regional implications.
9. **Risk of Civil Unrest:**
 - The company's insolvency and mismanagement contribute to an unstable environment.
 - Privatisation is hindered by the risk of civil unrest, creating a geopolitical flashpoint in the region.

QUESTION

What is required by this company in order to turn it around and save it from self-destruction?

THE RESOLUTION

Observationally, it's evident that the company has succumbed to 'my side bias' and 'authority bias'. The leadership's manipulative insincerity, combined with the staff's ruinous empathy, is fuelled by unionised obnoxious aggression. To initiate a turnaround, pinpointing the starting point is crucial. Objective Quantifiable Evidence (OQE), derived from strategic questioning within the organisation, becomes instrumental in crafting the narrative. The BAMPlus™ tool aids in this process, although it doesn't guarantee the adoption of radical candour; it merely

facilitates its communication. The essential prerequisites include robust leadership, strategic focus, and alignment. Fundamental change hinges on altering learned behaviours. Establishing a "golden thread" from the Government's strategic direction through corporate operational plans down to the staff is imperative. This ensures a clear line of sight for employees, aligning their daily activities with the company's plans, policies, and strategies to meet Government initiatives.

Turning around a company with deeply ingrained issues requires a systematic and holistic approach. Below is the step-by-step plan developed for implementation:

- 1. Leadership Alignment and Training:**
 - Ensure alignment among top leadership regarding the need for change.
 - Provide leadership training on effective communication, strategic thinking, and change management.
- 2. Organisational Culture Shift:**
 - Encourage a culture shift towards transparency, accountability, and proactive problem-solving.
 - Address 'my side bias' and 'authority bias' through awareness programs.
- 3. Behavioural asset management (BAMPlus) assessment:**
 - Utilise the structured tool to gather Objective Quantifiable Evidence (OQE).
 - Use the tool to encourage radical candour and identify key areas for improvement.
- 4. Strategic Planning and Alignment:**
 - Develop a clear and effective corporate strategy aligned with Government initiatives.
 - Establish a "golden thread" connecting high-level strategies to daily operations for all staff.
- 5. Communication and Engagement:**
 - Implement a robust communication strategy to convey the need for change and the company's vision.
 - Engage employees at all levels to ensure their understanding and commitment to the new direction.
- 6. Performance Metrics and Accountability:**
 - Introduce Key Performance Indicators (KPIs) at all levels.
 - Establish a system of accountability, linking performance to rewards and consequences.
- 7. Financial Restructuring:**
 - Undertake a comprehensive financial restructuring to address inefficiencies and prioritise spending.
 - Review and renegotiate contracts to ensure financial sustainability.
- 8. Legal and Regulatory Compliance:**
 - Conduct a thorough review of legal and regulatory compliance.
 - Ensure that policies and practices align with national laws and governance standards.
- 9. Union Collaboration:**
 - Collaborate with unions to align their objectives with the company's strategic goals.

- Encourage open dialogue and negotiate changes that benefit both the company and its workforce.

10. Technology Adoption:

- Implement modern technologies to streamline workflows and enhance efficiency.
- Invest in training programs to ensure staff can effectively use new technologies.

11. Professional Development Programs:

- Reinstate and enhance professional development programs, focusing on relevant competencies.
- Link professional development to career progression and salary incentives.

12. Risk Management and Geopolitical Strategies:

- Develop and implement risk management strategies, addressing financial, operational, and geopolitical risks.
- Engage in geopolitical dialogues to ensure stability and support for necessary reforms.

13. Stakeholder Engagement:

- Engage with external stakeholders, including donors, to build support for the company's turnaround.
- Foster positive relationships with governmental bodies, NGOs, and the community.

14. Community Impact Assessment:

- Conduct a community impact assessment to understand the social implications of the turnaround plan.
- Develop strategies to minimise negative impacts and enhance positive outcomes.

15. Long-term Vision and Capacity Building:

- Establish a long-term vision for the company, outlining milestones and growth strategies.
- Invest in capacity building initiatives to strengthen the organisation's ability to adapt and thrive.

16. Gradual Privatisation Planning:

- Develop a phased privatisation plan with a focus on maintaining stability and ensuring a smooth transition.

17. International Collaboration:

- Collaborate with international agencies for expertise, financial support, and guidance.
- Leverage international partnerships to enhance the company's capabilities and credibility.

18. Continuous Monitoring and Adjustment:

- Implement a system for continuous monitoring and adjustment of strategies based on feedback and evolving circumstances.
- Foster a culture of continuous improvement and adaptability.

19. Employee Recognition and Engagement:

- Implement recognition programs to acknowledge and reward positive contributions.
- Foster a sense of ownership and engagement among employees.

20. Evaluation and Learning:

- Regularly evaluate the effectiveness of implemented strategies.
- Encourage a learning culture where lessons from both successes and failures are used for continuous improvement.

Shifting the focus to BAM™ will support the company in aligning with its sustainable strategy, emphasising:

- Adherence and alignment to *process*;
- Accuracy, pride, understanding and rigour in *data* management;
- Using *technology* as an enabler;
- Effective escalation/delegation, process adherence, ‘ownership’ and consensus-building in *decision-making*;
- Organisational and personal levels of *collaboration*; and
- Enhancing personal productivity as well as asset and corporate *performance*.