Mainstream Conference 2019 Highlights

2 Sept 2019

2019 has been an exciting year for asset management. Technology implementations have hit their stride with many companies successfully striking the balance between human effort and technological innovations. Strategy is being underpinned by a strong asset management mindset, elevating the important work we do to the board level.

And it's all being tied together by the human element. As ever, without alignment of our people, nothing will cut through.

These were some key themes we heard during the presentations at this year's **Mainstream Conference**, a unique event for maintenance, reliability and asset management professionals. The annual event, which has been running for 24 years, brought together over 400 asset management professionals from 140 companies to hear the latest in asset management strategy, innovation and technology.

Here is a summary of key themes and session highlights from Mainstream Conference 2019.

Strategy Goes Deeper than Asset Management

Our Mainstream community were eager to hear how companies are fostering an Asset Management mindset within their organisations and aligning this with their overall company objectives. We heard from several leaders in this area who shared their strategies for transformation.

Anna Wiley, BHP's Head of Asset Management, gave us a view inside their global Maintenance Centre of Excellence (MCoE), an initiative which has successfully moved BHP from 40 separate maintenance organisations to one globally connected community.

"The MCoE represents a fundamentally new approach to maintenance for BHP," Anna said. The emphasis has been on concentrating efforts, applying standardised and repeatable processes, employing mathematical and data analysis, and maintaining a cadence on delivery through a centralised project management team. This combination creates an end to end system level fix, from master data to executed plans.

Anna shared that there was some hesitation from teams within BHP who were concerned that centralized governance would create more work, but they had been pleasantly surprised by the outcome. "The system was designed with the front line in mind and it was important to us that these changes made life easier for our people," Anna said.

Sydney Water's Head of Asset Knowledge, Tammy Falconer asked us to reflect on our data strategies given the increasing volume of data created. Are we all drowning in data?

She shared how Sydney Water is [maximising the value of their data](), focusing on four aspects: people, process, information and technology.

Tammy's advice to other organisations looking to improve their data is:

- **Define what data is important** to you regardless of which system it is stored in and govern it

- **Measure and track** your data quality on a regular basis

- **Invest in root cause analysis** to identify and fix the causes of the poor quality

- **Resist the temptation to simply fix data**: Fixing data on a project-by-project basis isn't sustainable in the longer term and it isn't ensuring that your data is fit for purpose when you need it to make decisions.

Sarah Hannah, AGL's Acting Head of Asset Systems gave us a lesson in the importance of linking your asset strategy to your culture. By [focusing on culture transformation instead of initiatives](), they have rectified persistent issues that were costing the company millions of dollars.

One example she gave was their feedwater heaters – AGL were operating with many feedwater heaters out of service, resulting in a loss of $20m per year. The team used human-centred design techniques to identify the behavioural root cause i.e what processes, actions and behaviours of their people were causing this break down in information flow?

"If you aren't identifying the root cause behaviours around the problem you are trying to solve, no matter how much budget or how sophisticated your strategy is, it will never succeed in the long term," Sarah said.

Digital Twins, Drones, Automation and Real-Time Data

The Mainstream community were also interested to hear about the emerging technologies that are transforming Maintenance, Reliability and Asset Management in 2019. How are companies using these technologies right now? And what solutions are the top innovators are looking to implement in the future?

We heard some fascinating case studies from leading Australian companies who are using technology to transform asset management:

- Pan Aust is using **sensor data** to extend asset operating times, optimise adjustments, and monitor health of components that are not able to be visually inspected.

- AGL is using a high performance PI Server that acts as a highly adaptable and connectable **real-time data** historian that can connect to almost all power station field device. As well as a **digital twin** to "find failures before they find us" which has had $26.7 million value realised since installation.

- Endeavour Energy – the first Australian electricity network company to create and use a **digital network twin**. They've created a complete digital model of the above ground electricity network, comprised of over 35,000 km of line and covering 25,000 square kilometres.

- Melbourne Water is reinventing traditional inspection practices by using **drones and submarines**, targeting traditional hands-on activities that are "dull, dirty, dangerous and dear" to lower cost, risk and time.

- Origin Energy is using **automation** to make the best use of available resources. They have implemented automated activity scheduling technology to map tasks to people and auto schedule work according to availability.

Your People Remain Your Biggest Asset

There is one theme that has endured in the 24 years that Mainstream Conference has been running:

Asset management is (still) all about people.

It's still clear that no investment in new technology, processes or programs will successfully transform asset management if your people are unable to come along on the journey. The Mainstream community heard from some top thought leaders and organisations about effective leadership and what it means to build a culture to support your asset management goals.

Daniel Murray, CEO of Empathic Consulting, highlighted the importance of staying connected to our people in an increasingly disconnected world.

"As businesses become more digitally focused, we are interacting more, but with far less depth. Hundreds of emails, chats, social media posts and shortened meetings are resulting in more noise but less engagement and understanding," he said.

Daniel unpacked the basics of neuroscience and gave us a step-by-step guide to building empathy in the age of Tinder.

Paddy Upton, Human Performance Expert and International Cricket Coach, enlightened us on the value of teamwork and how we can get the most out of our teams by harnessing collective intelligence.

"Times have changed, leadership has changed, but not all organisations have successfully made the shift from industrial area management, coaching and leadership practices to those required in the modern-day knowledge-era," Paddy said.

He gave us a framework for sharing information: Execute > Review > Plan > Test. "There's a very simple cycle of adult learning," Paddy said. "What we need to do harness the intelligence of the group in all phases of the learning cycle."

Richard Ison, General Manager Airline Engineering and Planning, shared how **Air New Zealand** has completely overhauled their processes to bring their people together.

By working collaboratively with their people to analyse the integrity of their physical and computer processes, they have defined the "one best way" to work together.

They developed KPIs and effective reporting alongside competency frameworks and associated training requirements. They also looked ahead and considered how their peoples' requirements would need to change and adapt as the organisation moves into the digital age.

Richard's advice? "Do not simply lock your SMEs in a room and ask them to map the perfect process. They will need help often in the form of an experienced facilitator (who is generally well worth every dollar spent). They may be your business SMEs but that does not mean they have the skill to run the process of developing a process."

Tech Start-Ups Pitch for Glory

While it's great to hear from the heavyweights of asset management, we also know the value of the listening to the new kid on the block.

To shine a light on the new ideas and innovations powering reliability, maintenance and asset management, we ran a start-up pitch competition during Mainstream Conference 2019. Six technology start-ups had the chance to pitch their ideas and showcase their technology.

Machine Dreams, a SaaS platform service running a simulator that generates high resolution images of assets and environments, were declared the winners, scoring themselves $1000 and some incredible connections with some of the industry heavyweights of asset management.

A huge thanks to everyone that made [Mainstream Conference](#) 2019 another overwhelming success. The talented speakers who so openly shared their ideas, successes and even failures. Thanks to our incredible sponsors who make these ideas come to life with their technology. And of course the Mainstream community – your passion for driving the innovation agenda in your teams and organisations is what gives this event life.

Next year is the 25th anniversary for Mainstream Conference, and we have some big plans for this special event (sorry no spoilers, you'll have to wait and see!). Join us at Crown Promenade, Melbourne, 10-11 August 2020. [Secure your spot here](#).