CHALLENGES
OPPORTUNITIES
CONNECTIONS

Advanced Asset Management

NAMS
New Zealand
IPWEA
INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

ROTORUA | MON 2 & TUE 3 NOVEMBER 2020

1 Interconnection – Monday 2 November

1.1: Overcoming barriers to embedding asset management
David Jeffrey[1] and Maxine Forde[2]
[1] Infrastructure Associates, [2] Ministry of Health

Asset management is still not widely understood at executive level in central government and asset management is not pervasive. Why is that? What are executives really interested in and would asset management help government departments achieve their objectives? What type of assets do Government Departments own and control? Should we focus on physical assets or technology?
We will identify solutions to identify the value and impact of asset management to executives and include ideas on how to structure asset management programmes to achieve maximum impact. The presentation from a range of viewpoints.
The government sector needs help from more mature asset management sectors. How can you help spread the asset management gospel to other sectors to improve the value of asset management overall?

David Independent consultant with over 20 years' experience in asset management, working with both local and central government. David developed the ICR tool for AM reviews and has reviewed nearly all the central government agencies over the three tranches. David has recently been helping the Ministry of Health and several local government agencies with AM initiatives.

Maxine. Leading strategic asset management across the New Zealand public sector. This includes developing strategies for improving asset management as well as working with individual agencies to support performance improvements. Most recently responsible for the National Asset Management Programme across the Health Sector but prior to that was The Treasury asset management lead. Also previously developed property and ICT asset management plans at DIA and delivered the new schools programme.

1.2 The 3 Socials of Asset Management
Rachel Maas[1] and Priyani de Silva-Currie[1]
[1] Just add Lime

Meeting the infrastructure needs of current and future populations in an already contested landscape is one of the biggest challenge's asset managers face. Infrastructure assets are built and managed for people, so why do people form action groups, protest, lodge objections, complain to politicians or go to the media; costing time and money? A key to understanding the answer lies in the role 'these people' play in the planning, construction, operation/maintenance and decommissioning of an infrastructure asset.
The role people play is best summarised as the '3 socials' – social impact, social outcomes and social licence. Social impact refers the impacts people experience (positive and negative), social outcomes are the benefits designed for people and social licence is the informal licence people grant or withhold from an organisation. The '3 socials' are interlinked and dynamic across the life of an asset, so understanding the them enables managers to plan, manage risk and make informed decisions.

This presentation will demonstrate how the '3 socials' are interlinked and will provide examples of how they can be utilised to steer our way through the challenges of building new and maintaining existing infrastructure assets into the new decade.

Rachel Maas has 20 years' experience conducting Social Impact Assessments (SIAs) and community engagement projects covering land and marine infrastructure, resource development and aquaculture projects in urban, rural and remote communities. This includes over 30 SIAs under relevant State legislation across Australia and Aotearoa New Zealand.

Priyani de Silva-Currie has more than 25 years' experience as a trusted asset management advisor to a number of large infrastructure providers across New Zealand and Australia. Priyani has unique skills and experience in bridging the gap between Asset Management, Operations and Maintenance Planning, Implementation, and Financial and Strategic Planning.

2 Digital Transformation – Monday 2 November

2.1: We Have This BIM Model, Now What?
Mary Mohs[1]
[1] Christchurch City Council

How do you transition from a BIM model to an Asset Information Model (AIM) at asset handover? During asset handover of a Facility, contractors present as-built asset data to the Facility owner in various formats including a Building Information Model (BIM).

Typically, the owner then wants to input the as-built data into their asset management information system (AMIS) as assets, in a structure that is logical and maintainable. However, the asset creation process is time consuming due to the large volume and diversity of building assets which can be added to the asset register. Building owners identify the BIM model as a useful source of information to automatically create assets in the AMIS as suggested in "Unlocking the value of BIM" by Ann Kennedy-Perkins (2018) but very few have implemented a solution.

The scope of this abstract is to discuss methodologies for identifying and extracting asset data from BIM model with the purpose of asset creation in an organisation's AMIS. I will share the journey Christchurch City Council has been on as we embark on making our BIM models provide value at asset handover underpinning our BIM success with business success.
The outcomes of this abstract are to discuss workflow, data schema and data standards for extracting asset data from a BIM model based on New Zealand Asset Metadata Standard Version 2 (NZAMS) for asset creation at asset handover.

Mary hails from Minnesota, USA. She began her career as a mechanical engineer and found her best solutions connected people, systems and data. She's been a connection and mediator between the practical requirements of business and the IT teams supporting ever since.
Optimistic pragmatism drives Mary's enviable record of success.

2.2 How to get ready to embrace 'Human first' Industry 5.0
Rekha Kharbanda[1]
[1]Tonkin + Taylor

In the past few years, we have seen a lot of organizations kickstart their journey of transformation to embrace Industry 4.0. The transformation initiatives were cutting across various dimensions of people,

process and technology to adopt the use of cloud technologies and harness the power of big data.

The focus of organizations has recently been to be more customer centric and enhance the employee experience by new value-add services, automation of processes, adopting agile methodologies of delivery and a data driven approach to strategies and operations.

But staying at the top is getting tougher and more challenging due to fast-growing and changing digital technologies and AI-based solutions. Due to COVID-19 there is a strong intent to push for an increase in productivity and value engineering to achieve the same function at par quality and at lower cost. COVID-19 has also made us realize that the triple bottom line (people, profit and planet) needs to be embraced and lock down gave us time to reflect on how to achieve sustainability in the future.

The 'human first' approach is what Industry 5.0 is all about. The Fifth Industrial Revolution will pair human and machine to further utilize human brainpower and creativity to increase process efficiencies by combining workflows with intelligent systems. The linking of AI algorithms with the planet aspect to keep humans first will pave the way for better technology solutions to save the environment and increase sustainability.

Industry 5.0 will be a synergy between humans and autonomous machines where we will learn the rules of the game together to achieve a more sustainable future. This paper is intended to highlight the transformation roadmap organizations need to keep building Industry 4.0 and move to Industry 5.0.