Considerations for infrastructure asset owners

NEW ZEALAND INSIGHTS

Asset management is becoming increasingly important to meet demands of a growing New Zealand population, drive sustainability efforts, maximise asset value, make informed decisions around investment, and comply with regulatory requirements.

We have reflected on some of the trends in the infrastructure sector, highlighting five key areas.

These insights have prompted key questions we think asset managers should consider in evaluatating the effectiveness of their organisation's asset management practices.

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1. Urgent action needed to address ageing assets

New Zealand has a significant portion of infrastructure assets that are approaching or have surpassed their intended lifespan. The Infrastructure Commission recently found that New Zealand is not sufficiently investing in maintaining our existing infrastructure[1].

$6 out of every $10 should be directed towards renewal when considering the age of our national portfolio.

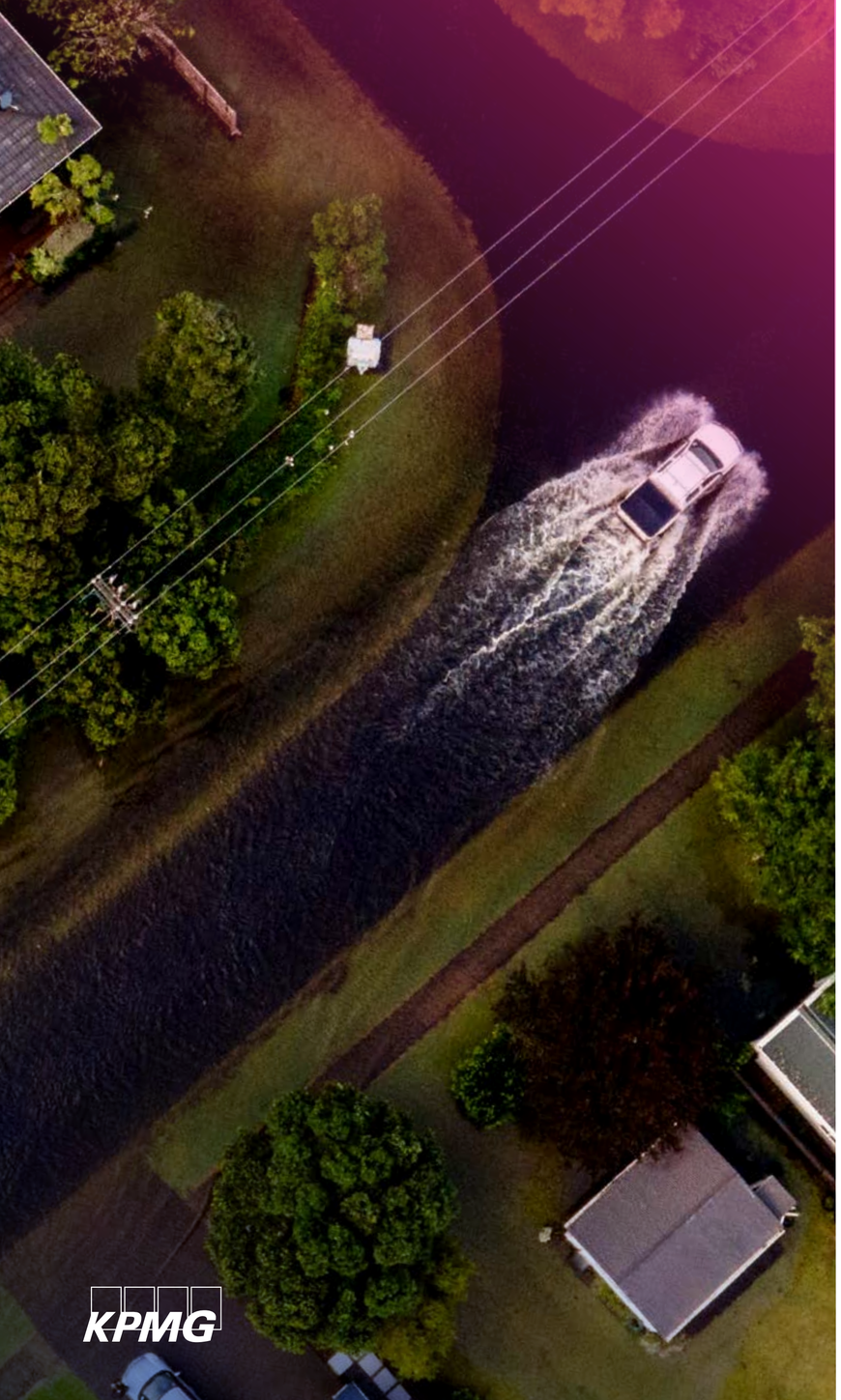
Asset owners are consistently faced with the tough decision of whether to spend on renewal or replacement, or growing through investment in new assets in order to guarantee the required level of service for their business. Moreover, there is a growing need to successfully integrate new technologies into operations, which adds complexity when it comes to maximising the efficiency of older assets. This task becomes even more challenging as budgets continue to tighten.

To make these choices easier, it is important to understand the value of assets and how quickly they wear out or become outdated. This can be done by setting performance goals for assets, assessing their condition and performance thoroughly, and using cost-benefit analyses to compare maintenance and replacement options.

Question for asset managers:

Do you have a framework in place to measure the value obtained from your assets, and are you using it to direct the investments made by your organisation?

1 | Infrastructure commission – Build or maintain?



2. The key role of critical assets in resilience and adaptation

New Zealand is confronted with various hazards, such as earthquakes, volcanic eruptions, and extreme weather events like Cyclone Gabrielle, which have the potential to cause significant damage.

The recent power, transport, and water outages have exposed the vulnerabilities of our critical infrastructure system. Furthermore, as we increasingly digitise our assets, they become more susceptible to failure caused by cyber attacks, espionage, and terrorism, which can disrupt vital services and have a substantial impact on society and the economy

Initiated in 2023, the NZ Government consulted on the vulnerability of our assets, need for critical infrastructure resilience, and identified barriers that require attention for improved outcomes and benefits for all New Zealanders. The government is currently looking into how a well-suited regulatory framework can help our critical infrastructure system effectively handle both current and future risks[2].

2 | Lifting the resilience of New Zealand's critical infrastructure | Department of the Prime Minister and Cabinet (DPMC)

Achieving alignment and collaboration across the public and private sectors is crucial to enhance resilience, ensure public safety, and maintain economic stability. By working together, these sectors can effectively manage disruptions, address threats proactively, share vital information, optimise resource utilisation, and safeguard essential services and economic growth.

What's more, every organisation possesses critical assets that are essential in achieving key business outcomes and contribute value. It is important for all asset owners to adopt robust safeguarding measures to mitigate physical threats, cyberattacks, and disruptions in the supply chain.

Question for asset managers:

Is your business resilience strategy influenced by the risk associated with your asset portfolio, and do you rely on this to drive resource allocation and funding decisions?

3. Slow uptake in Digitisation and Technology Integration gains

Infrastructure NZ acknowledges that New Zealand is not currently maximising the potential of digital, geospatial, and data technologies to effectively address our infrastructure challenges, improve resilience, and advance decarbonisation goals[3].

Insufficient or poor asset data can lead to asset owners missing out on the potential efficiencies offered through the adoption of Infratech on a global scale. Many organisations still struggle to improve decision-making by making infrastructure asset data more accessible and transparent. Additionally, there is a limited focus on consolidating and sharing data among relevant stakeholders through centralised platforms or open data initiatives.

New Zealand's location and current cost of capital make a strong case for improved efficiency and transparency through readily available, high-quality data. It is important to recognise that more data does not always mean better quality. Understanding the relevance of data to critical assets, the cost of data collection, and integrating data across asset systems architecture are equally important in driving insights, enabling effective decision-making, and improving resource efficiency for sustainable asset management.

Questions for asset managers:

- **Does your asset information strategy articulate how your organisation will gather and use information around performance optimisation, operational efficiency and cost?**
- **Do you have a roadmap for incremental improvement?**

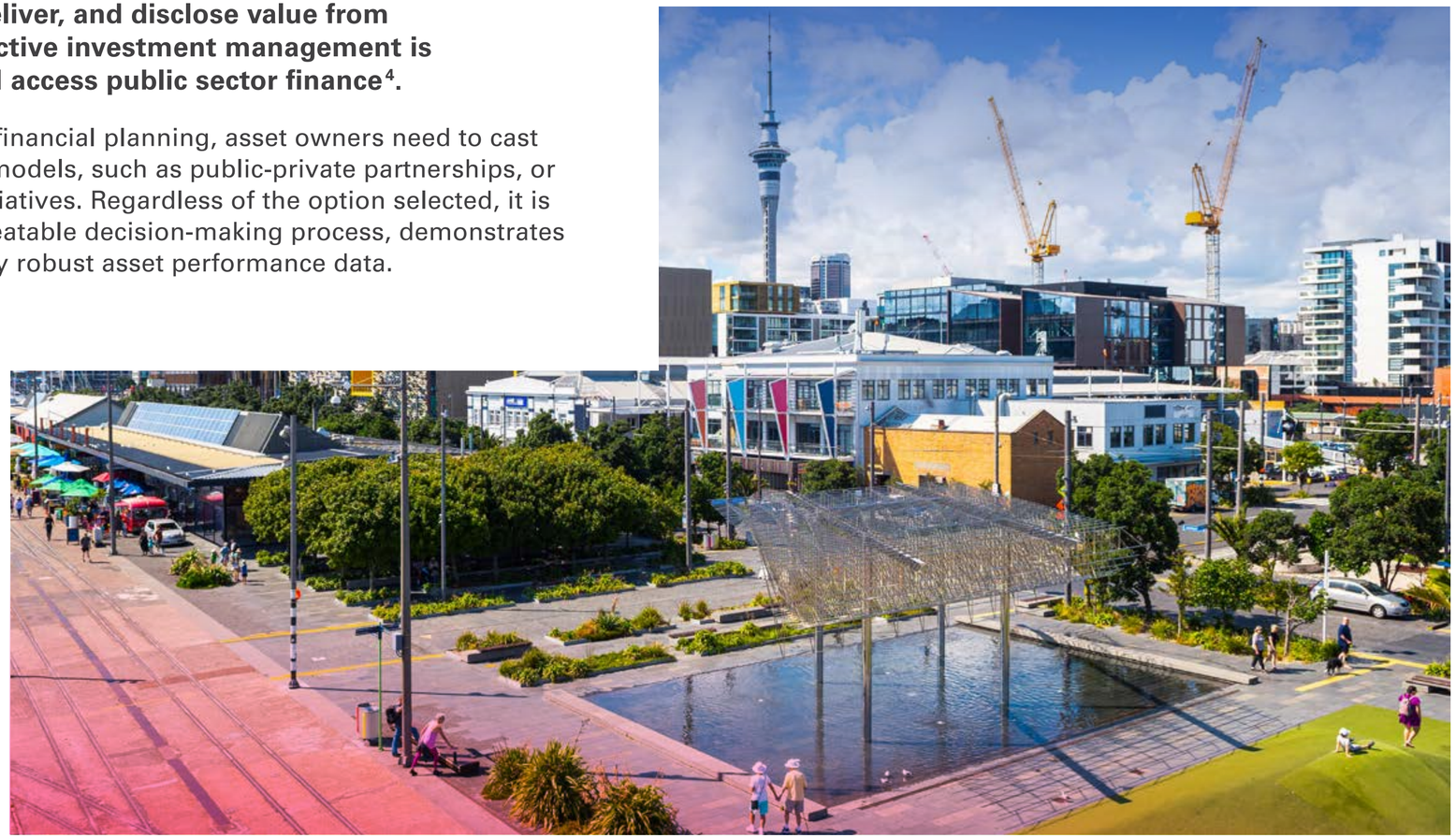
4. Funding and Financing constraints

Funding limitations directly affect the budget allocated for asset investment, leading to greater challenges for public sector asset owners in their efforts to secure sufficient financing to sustain assets. A key part of responsible stewardship of Crown resources is having a robust approach to define, deliver, and disclose value from these investments. The ability to demonstrate effective investment management is becoming a mandatory condition to qualify for and access public sector finance[4].

To attract investments and facilitate effective long-term financial planning, asset owners need to cast their net wider: whether it is exploring diverse funding models, such as public-private partnerships, or opting for no-build solutions such as asset recycling initiatives. Regardless of the option selected, it is essential to ensure that it follows a transparent and repeatable decision-making process, demonstrates alignment with organisational priorities and is backed by robust asset performance data.

Question for asset managers:

Does your investment selection process rely on current asset performance data, maintain utmost transparency for all stakeholders, and consistently demonstrate credibility?



4 | DPMC Cabinet Office Circular 23 (9)

5. Sustainability and Environmental Impact

The infrastructure sector has been widely found to have a poor sustainability track record, especially when it comes to its impact on climate change and the high costs associated with adaptation. The sector's use of resources is also a major concern, as construction alone accounts for over half of global raw material consumption, but less than 10% is used in a circular way[5].

To make infrastructure assets more sustainable and reduce the creation of waste, it is important to prioritise certain actions. Initiatives like designing for durability, using efficient materials, adopting lean construction practises, and implementing effective maintenance techniques can significantly contribute to improving the resource footprint of the sector.

Asset managers play a pivotal role as catalysts for change: they have the ability to influence and optimise resource allocation, promote resilience, and track performance and progress. Nevertheless, making a meaningful impact on sustainability involves more than just efforts within the organisation. It is vital to engage stakeholders along the entire asset supply chain to promote collaboration, drive innovation, and share best practises. In this regard, the asset managers' understanding of the asset management ecosystem becomes crucial for guiding organisations towards a 'whole of system' approach to improve infrastructure sustainability.

5 | Global status report for buildings and construction 2019, UN Environment programme

Questions for asset managers:

- **Has your organisation defined clear sustainability targets for its assets?**
- **Are your service providers and suppliers aware of your priorities and aligned with them?**

Whether it is lack of funding, neglected assets or changing regulatory obligations that's your burning platform, we can help you make the change.

The infrastructure issues in New Zealand are complex and require a multi-disciplinary approach. While effective asset management practises are crucial, it is also necessary to integrate finance, people, and risk disciplines to tackle these issues. This involves understanding how assets contribute to value and business objectives (defined value), identifying key activities to sustain it (line of sight), assessing the cost implications of owning and operating assets (whole of life), and considering the impact of a broader systems thinking approach on addressing these concerns (whole of system).

KPMG is a reliable partner that provides comprehensive solutions to asset-intensive organisations, assisting them in digitising, monetising, and transforming their assets. Our team of professionals utilises the collective expertise in our firm, incorporating process, people, and technology capabilities, to support clients at any stage of their maturity journey.

At KPMG, we support our clients to effectively manage their assets through **four fundamental pillars:**

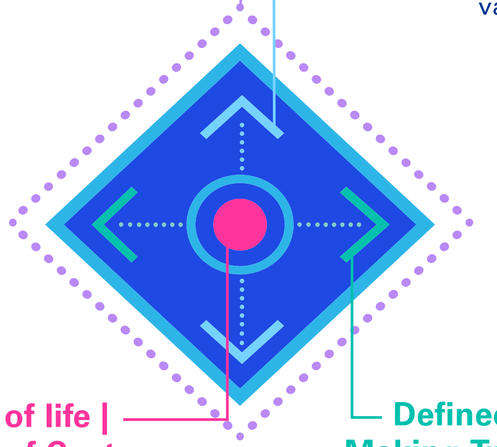
Whole of system | Clarity of Risk

All parts of the system producing a business outcome (supply chain, facilities, tools, people, process, data, contracts etc.) are considered.

Line of sight | Clarity of Benefits

All business activities can be traced to the overarching strategy and objectives.

The result is focused effort across high value areas.



Whole of life | Clarity of Costs

Total cost of asset ownership from 'acquire to retire' considered, including impact of early decisions and interventions, on future costs - OPEX and CAPEX trade-off.

Defined value | Making Trade-offs

Return on investment is understood through a value framework aligned to business objectives and enterprise risk.

Our team of certified asset management professionals collaborate closely with our infrastructure investment planning, commercial, sustainable value, and digital teams. Through our global KPMG network and infratech alliances, we have comprehensive experience in all asset management aspects, drawing upon deep expertise and domain knowledge that is data-driven and technology-enabled.

Reach out to our team today to explore how we can assist you on your journey of transformative change in asset management.

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