

\$4 Billion for the taking: How poor asset tracking is costing Australian business costing Australian business

Telyste Telstra Track and
Monitor Study 2019

How better physical asset management can
reduce financial losses and improve business
transformation and optimisation



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Foreword

By Gerhard Loots, Global IoT Solutions Executive, Telstra

Ever since I was young, I've been preoccupied with making things better. I remember my portable tape player used to eat up batteries when I skipped to the next *Modern Talking* or *Roxette* song. To fix this I built a mechanical device to fast forward the tape that worked better than the pencil-turning method of the time. I was also a doorman at the local cinema and built a radar device to help me with my difficult job of counting people in the darkened cinema – with minimal success I should add. Finding a better way to do things is what the Internet of Things (IoT) is about for me and that opportunity is incredibly clear when it comes to asset tracking.

Every day we are amazed to learn how lost assets are creating problems for Australian businesses. We've had conversations with construction companies, logistics organisations and even hospitals about the drain on budgets and the time wasted looking for lost things. We wanted to dig even deeper and find out how widespread the issue of loss really is in today's organisations – and the findings show that it's a big, silent challenge.

Telsyte's research found Australian organisations lose an average of \$4.3 billion in assets every year. Just let that sit for a moment. \$4.3 billion. That's like losing 21,000 buses, 850,000 shipping containers, or 2.8 million laptops. The harder figure to reconcile is the drop in productivity when the tool you need to do your job goes missing, or the value of the time spent searching for it – but more than half of respondents agreed that the cost of loss goes beyond the financial impact of replacing the asset.

And despite searching, there isn't always a happy ending for those who don't use tracking technologies. While 82 percent of organisations said they try to recover their lost assets, they are only successful 22 percent of the time. When more than half (57%) of business leaders said the efficiency of their business is dependent on asset utilisation, asset tracking becomes an important item on the company's agenda.

Telstra sees the problem of lost assets as not only a big one, but also something that technology can help solve. We have a long history pioneering new technology to improve the lives of Australians and are proud to have developed two locating platforms – Telstra Track and Monitor and Telstra Locator – to help our customers.

SCT Logistics was facing a \$4 million annual loss due to lost assets – from shipping containers to trailers and rail wagons. It is now rolling out Telstra Track and Monitor across 1,500 of its assets and based on the reduction in loss it expects the investment to be offset by savings within three years. That's one of many great stories about how IoT is helping us solve old challenges in new ways.

I encourage you to take a closer look at this report as there are many interesting insights into the problem of loss that we face as organisations, and the potential gains to be made with new technology.

Of course, today we can solve the cinema counting problem with simple video analytics –something we are now actively doing with our Smart Secure Spaces products, but more on that next time.

Gerhard.

About the research in this report

In preparing this study, Telsyte used an online survey of 470 business decision makers across Australian organisations which have physical assets to track and more than 20 employees (47% from organisations with greater than 200 employees).

The respondent was required to have a strong understanding of their organisation's physical assets tracking solutions purchasing and strategy. The sample is representative of the top 54,307 operating businesses in Australia. The survey had a confidence interval of +/-4.56 at a confidence level of 95%.

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\$4 Billion and Growing: Counting the cost of Physical Asset Loss

The value of assets unprotected by tracking technology is staggering in Australian business

Each year Australian organisations must manage a vast array of physical assets of varying value. From mobile devices to industrial machinery, physical assets are expensive to procure, manage and maintain.

To determine the scale of asset management challenges, Telsyte surveyed 470 organisations with more than 20 employees. The research found poor asset management is a \$4.3 billion problem plaguing Australian businesses.

The total loss of company physical assets is costing Australian businesses \$4.3 billion each year across the nine categories measured in the research.

1. Important small assets such as key cards
2. Shipping equipment or mobile storage
3. High-valued IT equipment
4. Vehicles
5. Small plant and equipment
6. Construction assets and machinery
7. Medical or laboratory equipment
8. Industry specific equipment and assets
9. Biological assets

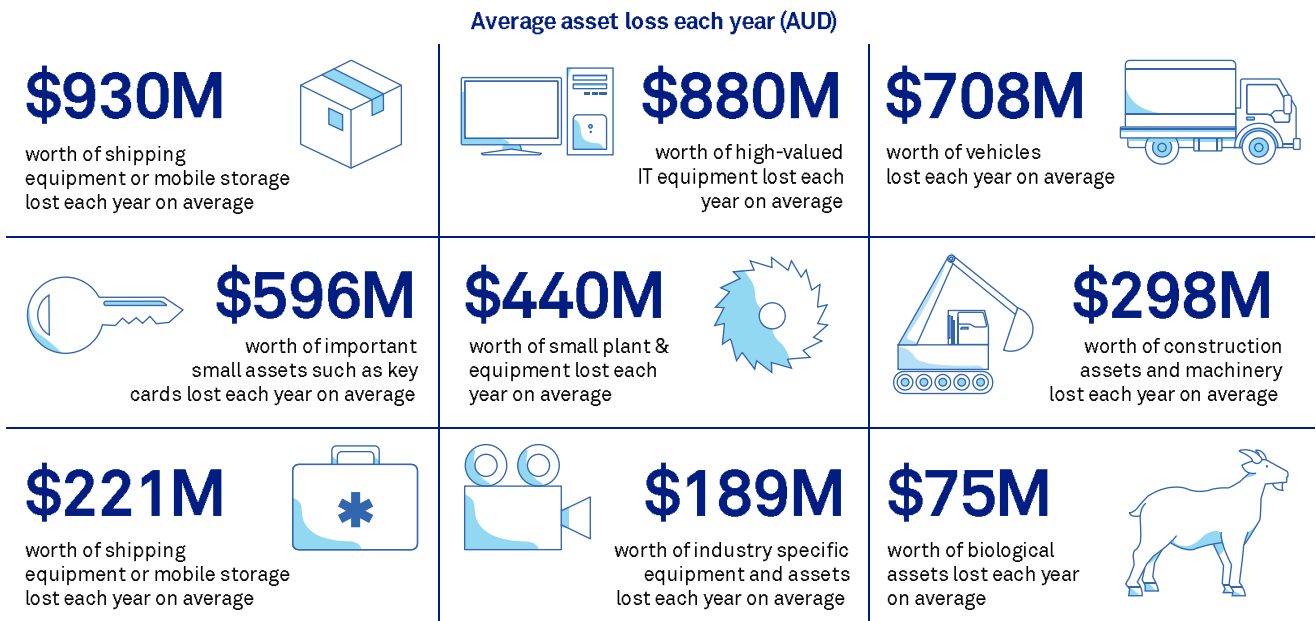
Across all types of businesses, the most common asset categories which have suffered loss include important keys and small assets (50%); high-value IT hardware (31%); and small plant equipment (28%).

Despite smaller physical assets such as access cards and storage keys having a low unit value, the flow on effect presents significant risks to business operations and can cause further costs in addition to the raw asset cost.

At the other end of the value scale, nearly a billion dollars' worth of shipping equipment or mobile storage is lost each year; more than \$800 million of IT equipment; and more than \$700 million of vehicles.

In one example, the survey found businesses have, on average, spent 55 hours (amongst all employees involved) during the last 12 months searching for lost physical assets that do not have an asset tracker attached.

Figure 1: Telsyte estimates of the value of assets lost each year (by type of asset)



Source: Telsyte Telstra Track and Monitor Study 2019

Without tracking, businesses are still relying on employees walking around premises to locate assets and manually log into systems to retrieve records.

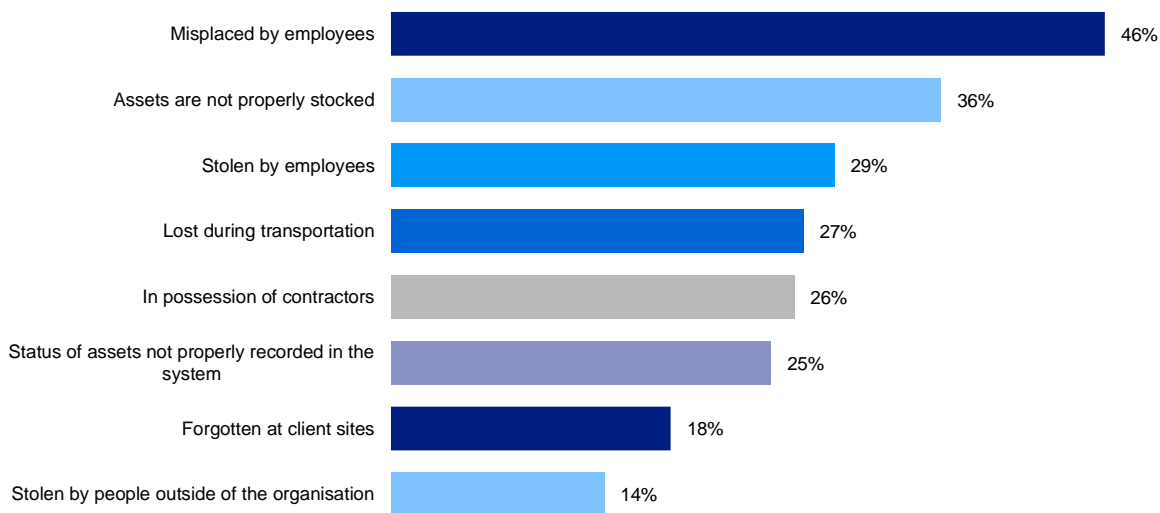
Many physical assets are being purchased (and used) with built-in tracking technologies and high-valued IT hardware and equipment ranked in the top three in five out of six industries.

Assets still easily misplaced or stolen

For organisations to improve their asset management strategy, an important first step is to determine how assets are lost in the first place.

Telsyte's research found physical assets that do not use any tracking technologies are most likely to be misplaced by employees (46%). This is followed by assets not being properly stocked in the first place (36%) and being taken by employees (29%).

Figure 2: The reasons organisations lose difficult-to-track physical assets



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=227; base: organisations that have lost non-trackable physical assets before

There is a huge cyclical problem for Australian businesses – staff are misplacing assets, which is leading to staff spending time finding them.

Even with the cost of asset loss so high, the research found only 3 in 5 businesses perform regular audits for these physical assets on a monthly basis, meaning there is big room for improvement in asset management requirements gathering. And less than half (44%) of businesses perform stocktakes at least once a month.

Avoid the cost of stocktakes

It's time to stop wasting resources and money on unnecessary stocktakes. Stocktakes being undertaken quarterly can be avoided with more real-time tracking solutions saving millions of dollars.

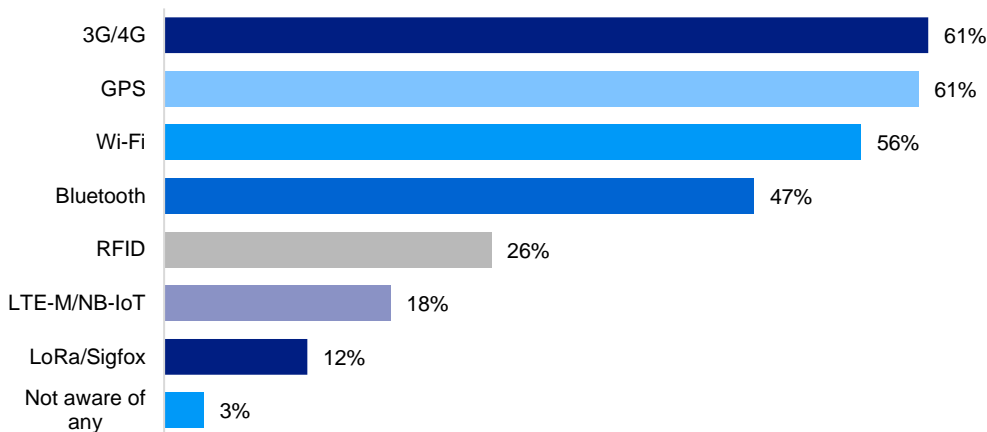
In addition, business leaders in organisations that have lost physical assets admit there is no adequate process in the organisation to identify the cause of lost assets (52%) and no adequate process to improve asset management (36%).

Tracking technology going unnoticed

Asset tracking technology is available in many forms and with the emergence of new high-speed wireless networks – both on a metropolitan and personal scale – businesses must evaluate all options to improve their capability.

The research found awareness of asset tracking technologies is higher for traditional asset tracking methods such as 3G or 4G mobile technologies (61%) and GPS (61%). However, many business leaders are still not aware that organisations can track and monitor assets using a mix of other emerging or cost effective technologies such as LTE-M/NB-IoT (18%) and Bluetooth (47%).

Figure 3: Which technologies used for asset management are decision makers aware of



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

Business leaders might be lacking in their awareness of emerging asset tracking technologies, but they are cognisant when it comes to the barriers preventing the adoption of technology-based asset tracking solutions.

Within organisations that have lost physical assets in the last 12 months (assets that did not have any tracking technologies attached), 82 per cent have tried to recover these lost assets; however only an average of 22 per cent of the time these assets are recovered successfully.

Overcoming the barriers to asset tracking is now critically important if losses are to be minimised and recovery improved.

According to the survey findings, the top perceived barriers are the high cost of solutions (29%); being behind in digital transformation (23%); cyber security concerns (23%); and not being aware of any lower cost asset tracking solutions (18%).

Figure 4: The barriers for adopting tracking solutions



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

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Big Gains with Asset Tracking: Businesses expect 134% return

Despite the challenges, business leaders expect a \$1.24 return for every \$1 spent on asset tracking solutions

As Telsyte's research found, asset loss is impacting businesses on more than just the cost of assets, however many see traditional solutions still too costly to implement.

Moreover, at least half (57%) of business leaders report their business' efficiency is dependent on asset utilisation.

It is clear there is a business case for asset management – both from a raw cost saving perspective and a business process improvement one.

More than half (52%) of organisations report losing assets costs more than the financial impact of the lost assets. This rate rises to almost two thirds (63%) among organisations that have lost assets before.

Among organisations intending to adopt tracking solutions cost, stalling in digital transformation and lack of network coverage are seen as the main barriers.

Despite the barriers and perceived challenges, the research uncovered a huge sense of positivity when it comes to the benefits of asset tracking.

On average, organisations expect a 134% return on investment from implementing asset tracking solutions – or \$1.34 return of every \$1 spent.

Beyond asset loss

Telsyte's research found the return on asset tracking extends beyond asset loss.

Many organisations still rely on manually “searching the premises” to physically locate assets, costing businesses valuable staff hours.

Figure 5: Which methods organisations use to track company assets



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

With half of businesses still having people manually log assets into a system for records, there is a lot of opportunity to automate asset tracking and, just as importantly, save staff time.

This is costing the business valuable hours and negatively impacting the end-of-year results.

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Asset Automation: IoT, Emerging Tech brings Asset Tracking into New Era

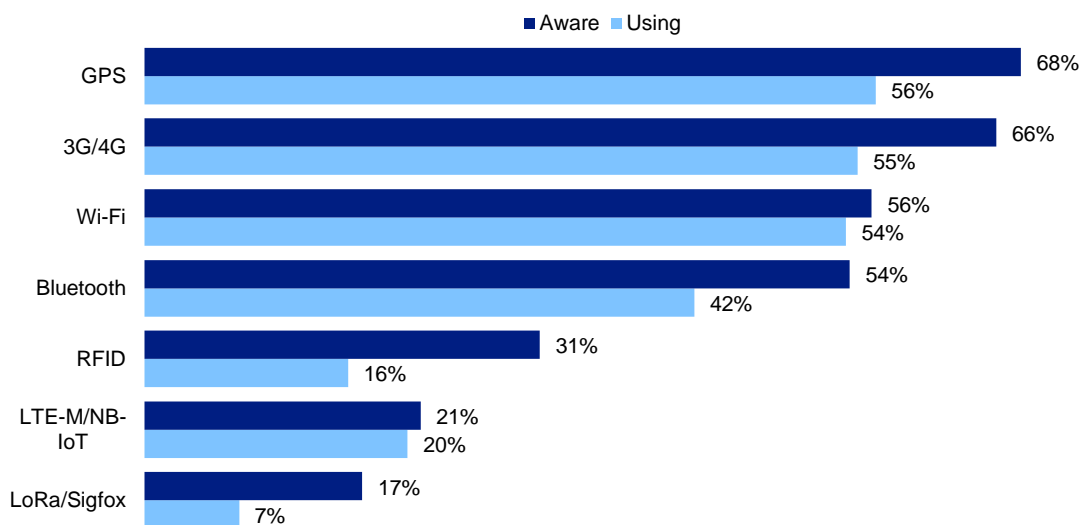
Low Cost IoT Networks now on the radar for Asset Tracking

The concept of asset tracking has been long associated with assets which have built-in tracking technologies to deliver business benefits; however, such solutions have been costly and limited to certain assets.

Traditional asset management tools are often proprietary, meaning the data was locked up, and limited by the type of network they were deployed on.

According to Telsyte's research, smaller sets of asset management data, including construction assets and shipping equipment, have the highest technology-based asset tracking solution adoption.

Figure 6: The type of technologies used for asset management



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=264; base: organisations using tracking solutions

Even with the heavy reliance on GPS (56%), 3G/4G (55%) and Wi-Fi (54%) solutions, fewer are eyeing new, or more cost effective, solutions such as NB-IoT (20%) and Bluetooth (42%) for asset tracking.

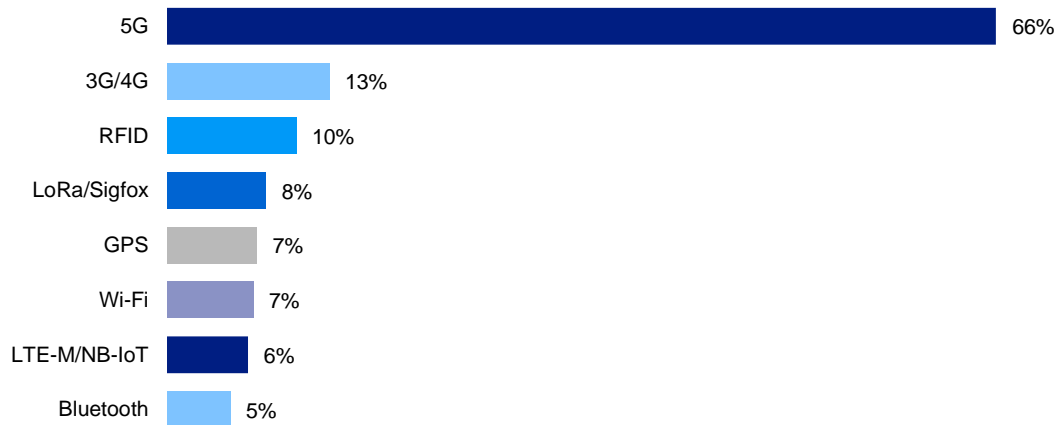
Business leaders are just as aware of Bluetooth as they are of GPS and 3G/4G for asset tracking. Bluetooth now has higher awareness than RFID; however, RFID is a much more widely adopted asset tracking technology than Bluetooth.

Awareness of Bluetooth tracking

Business leaders are just as aware of Bluetooth as they are of GPS and 3G/4G for asset tracking. Bluetooth now has higher awareness than RFID; however, RFID is a much more widely adopted asset tracking technology than Bluetooth.

A new generation of technologies is allowing businesses of all sizes to track and monitor their assets and the research revealed a strong interest in future asset tracking solutions utilising high-speed, low-latency 5G networks amongst businesses already using technology tracking solutions (66%) and potential adopters (39%).

Figure 7: Plans to adopt any other technology to manage different assets in addition to an existing solution



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=263; base: organisations using tracking solutions.

Before jumping into 5G for asset tracking, Telsyte recommends organisations should investigate all options, including low cost IoT networks (Bluetooth and Cat-M1/LTE-M) to find the right technology for their requirements.

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Asset Tracking now Strategic for Business Transformation

Businesses know they need Asset Tracking to improve their bottom line, but are slow to prioritise it

In today's connected supply chain economy, IT and business transformation has become increasingly dependent on the visibility of assets and applications.

In the case of physical assets, revenue losses associated with poor management are significant and impacts the ability of companies to invest in further digital transformation programs.

In addition, Telsyte's research found the ability to track and monitor assets (and access data) is critical to running a modern business.

More than half of businesses leaders believe the efficiency of their business is dependent on asset utilisation (57%) and half (53%) say it depends on the efficiency of asset management.

Figure 8: The drivers for adopting tracking solutions



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

Asset management and digital transformation

Digitisation is an important first step on the road to becoming a fully digital integrated business and almost all types of physical assets available today have some form of control system or computer which generates data.

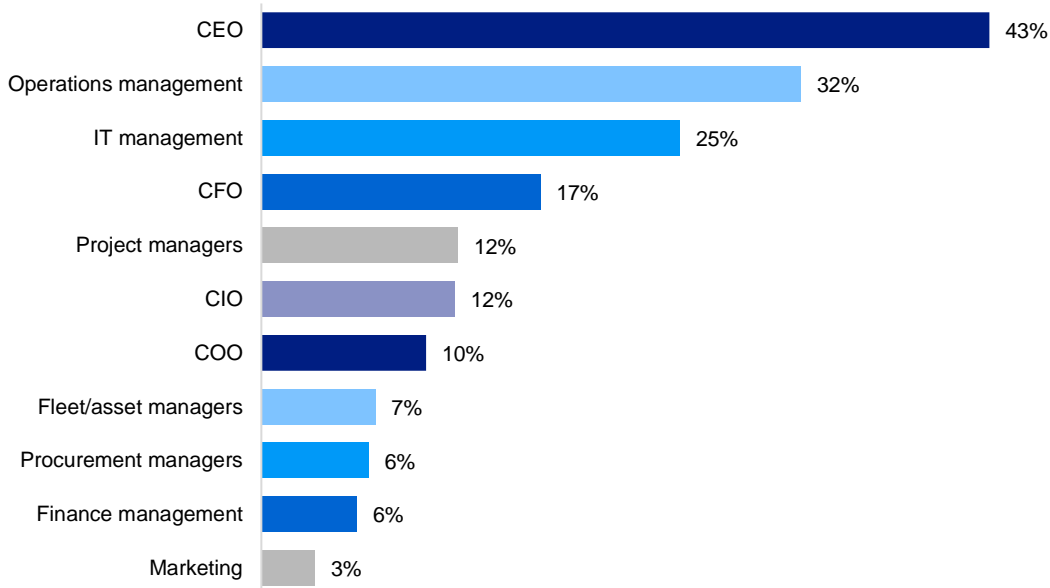
With two-thirds of Australian businesses (greater than 20 employees) currently undergoing a digital transformation program, a holistic approach that includes information from physical assets is becoming more strategic.

Among organisations undergoing a digital transformation, the main goals are improving the businesses' financial position and improving productivity – both of which directly relate to better asset management.

Asset tracking getting C-level attention

The research found most (58%) respondents believe the loss of assets is a priority for their organisation's C-level executives. When it comes to asset tracking decisions, the final decision makers are the CEO (41%), operations management (18%), and then IT management (9%).

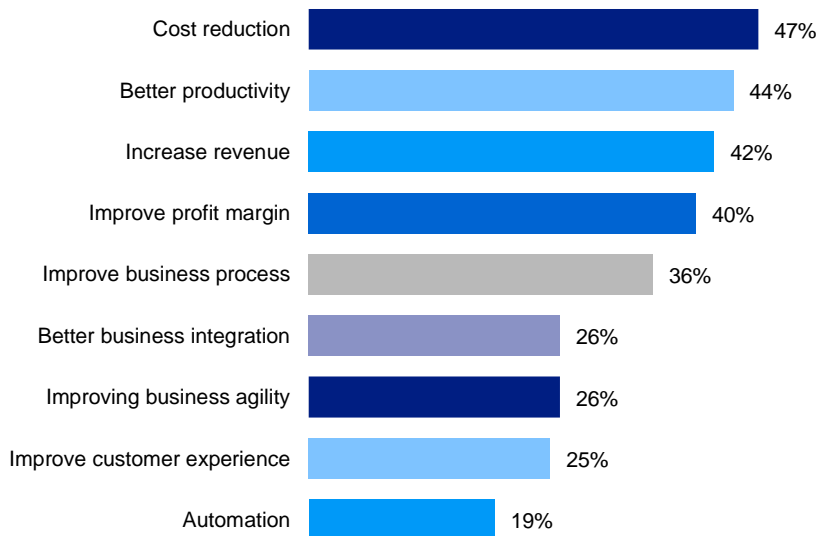
Figure 9: The decision makers for purchasing asset tracking solutions



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

The research found a clear link between digital transformation and asset tracking solutions. A strong majority (85%) of those undergoing digital transformation believe asset tracking is a strategic part of their organisations' overall digital transformation strategy.

Figure 10: The goals of digital transformation



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

Asset tracking's benefits and barriers

With the business and transformational potential of asset tracking clear to business leaders, the research investigated the factors for and against asset tracking adoption.

Amongst businesses that intend to adopt asset tracking solutions, the main drivers are cost savings (52%), preventing loss (47%) and improving employee productivity (32%). All factors can directly impact revenue.

Figure 11: The drivers for adopting tracking solutions



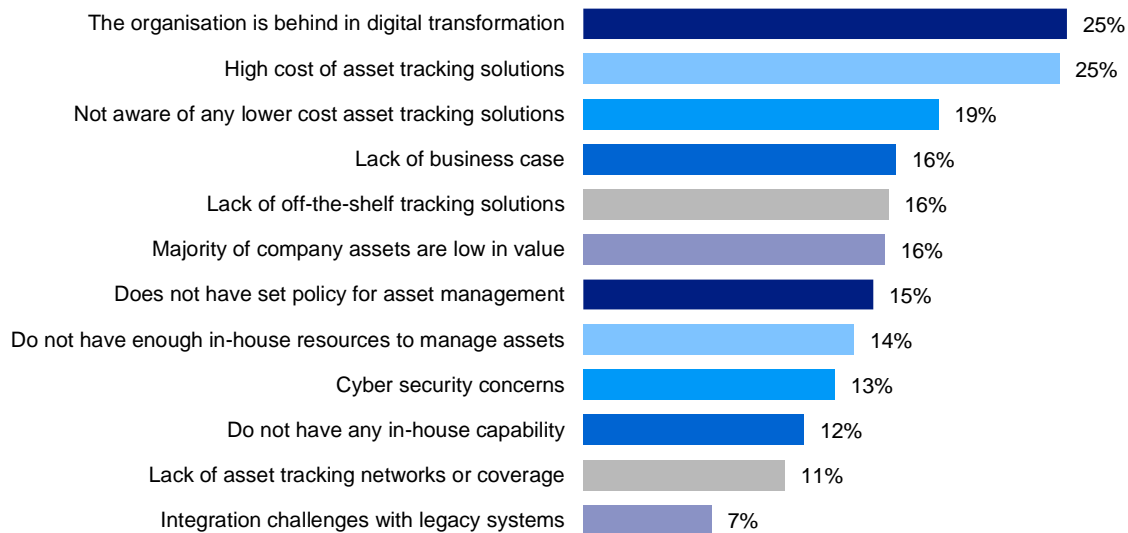
Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

Conversely, the research looked at the barriers for asset tracking adoption within organisation where it is not a strategic part of their digital transformation strategy.

The top barriers for adopting asset tracking solutions include the business is behind in digital transformation (25%), the high cost of solutions (25%), and lack of awareness of lower cost solutions (19%).

The barriers are in contrast to the ability of asset tracking solutions to potentially save organisations \$4.3 billion every year.

Figure 12: Key reasons for organisations not including asset tracking as digital transformation



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=142; base: organisations that do not include asset tracking as part of their digital transformation

Including asset management as a strategic business enabler requires a rethink and culture change for businesses, and the research looked at the impact of asset loss on culture and awareness. The CEO is the main agent of change when it comes to creating the culture of accountability required for successful asset strategy in more than half of organisations.

Organisations which have experienced asset loss are much more likely to create a culture of awareness to protect and mitigate their asset losses than those which have not (52% versus 38%).

Furthermore, companies that lost assets are much more likely to provide training for employees (58% versus 29%).

On the contrary, the research found those that have not lost assets have been relying more on creating a culture of accountability and responsibility for company assets (65% versus 51%).

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Improving with Next-Generation Asset Tracking

3 in 4 organisations have plans to find a Technology solution to keep track of company assets

To investigate how organisations can stop the asset management waste, the research looked at what they are doing to improve their capability.

About half of organisations using tracking solutions are already in the process of improving their existing solutions, and 76 per cent are have plans to find a technology solution to keep track of company assets, indicating a strong desire to address existing problems.

Organisations with an existing solution don't need proof that asset tracking works; however, they can continue to refine and improve their approach with evolving technologies.

Better reporting needed

Telsyte's research also looked at key attitudes regarding asset tracking culture within organisations.

Unfortunately, under-reporting and pride are the big issues when company assets are lost and company guidelines have little impact changing the culture.

Half (51%) of organisations that have lost assets before say there is under reporting of lost company assets by employees.

Is the Australian culture supporting a tall poppy syndrome, or a culture of fear? Or are staff in fear of being blamed for asset loss? Some Australian businesses would rather wear the cost of poor asset management rather than admit they are losing millions of dollars.

Adding to the problem, is the nearly half (48%) of respondents who reported it is embarrassing to report lost assets in their organisation.

Only 58% of organisations say they have clear guidelines for employees to report missing company assets, which increases to 65% amongst organisations lost assets before. Employees should have clear guidelines on what to do when an asset goes missing.

New wireless and mobile options

Traditional asset tracking has relied on GPS satellite systems, which provide the most reach out in the field.

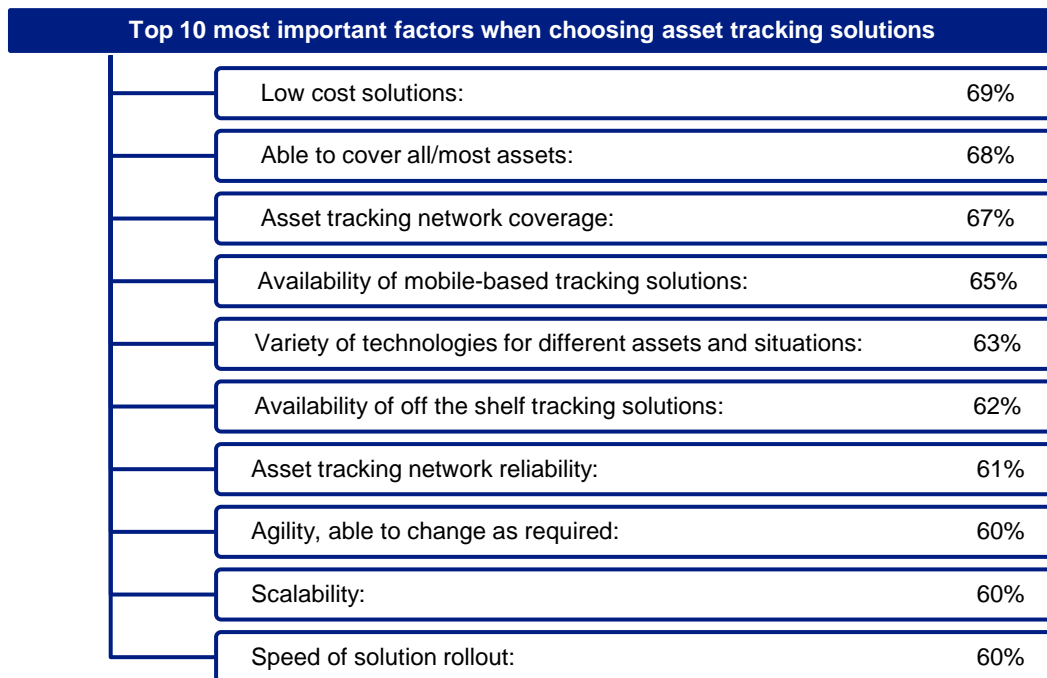
With advancements in high-speed mobile networks and more local options, such as Wi-Fi and Bluetooth, modern asset tracking can provide more real-time data to the business.

The research investigated the advantages of other tracking technologies over GPS and how businesses can benefit from mixing different technologies for different assets and scenarios, ultimately achieving a better ROI.

The majority of business leaders expect an 11 to 20 per cent return on their asset tracking investments, indicating the business case is sound for even a moderate investment.

With network coverage (67%) and reliability (61%) the foundation for asset tracking, other key factors businesses are considering when selecting an asset tracking solution, include the ability to cater all or almost all our assets (68%); low cost solutions (69%); the availability of mobile-based tracking solutions (65%); and a variety of tracking technologies available for different assets and situations (63%).

Figure 13: Top 10 most important factors when choosing asset tracking solutions



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

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Telsyte Recommendations

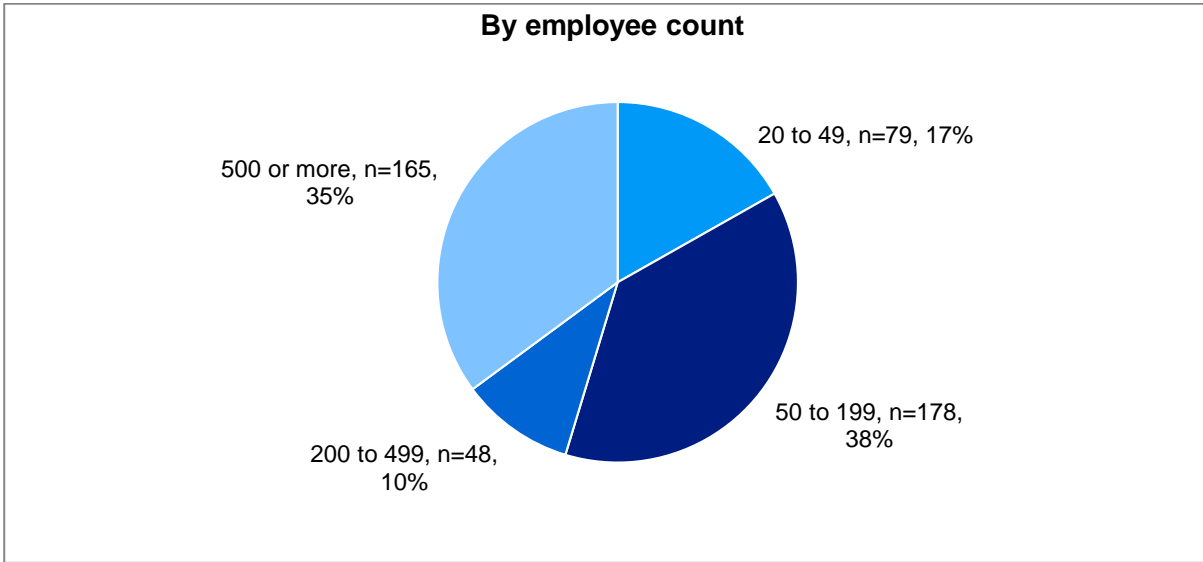
Telsyte's research into the strategic importance of asset tracking for Australian businesses revealed a strong link between asset tracking capability and cost savings and wider digital transformation strategies.

Business leaders can take numerous steps to improve their operations with modern asset tracking.

- **Treat asset tracking as critical:** Asset tracking is important as asset management is now central to a successful digital business strategy. Building a culture of responsibility is critical and needs CEO support.
- **Elevate it to digital:** Elevate asset tracking as a priority for the wider business. Better asset tracking can significantly reduce operating costs (and losses) and accelerate a digital transformation program. Organisations need to consider asset tracking upfront when undergoing digital transformation.
- **Develop clear guidelines:** Only 58% of organisations say they have clear guidelines for employees to report missing company assets. Employees should have clear guidelines on what to do when an asset goes missing, and be encouraged to do the right thing even if it's considered taboo.
- **Take advantage of new networks:** Invest in solutions that utilise ubiquitous networking technologies and avoid simply relying on one protocol, such as GPS.
- **Use the data:** Look to a real-time data future. Most new physical assets generate data which can provide real-time intelligence. And new networks can take advantage of this data allowing you to make better decisions based on real-time data. Asset tracking can provide much more than just help to find lost assets.
- **Optimise processes:** Businesses can now optimise business processes, customer experience and asset utilisation based on tracking data. This is a good example of how better asset management ties back into transformation programs.
- **Empower staff:** Minimise asset loss by empowering employees with the right technologies and creating a culture of accountability and responsibility. This will reduce asset loss and help elevate the strategic importance of asset management.

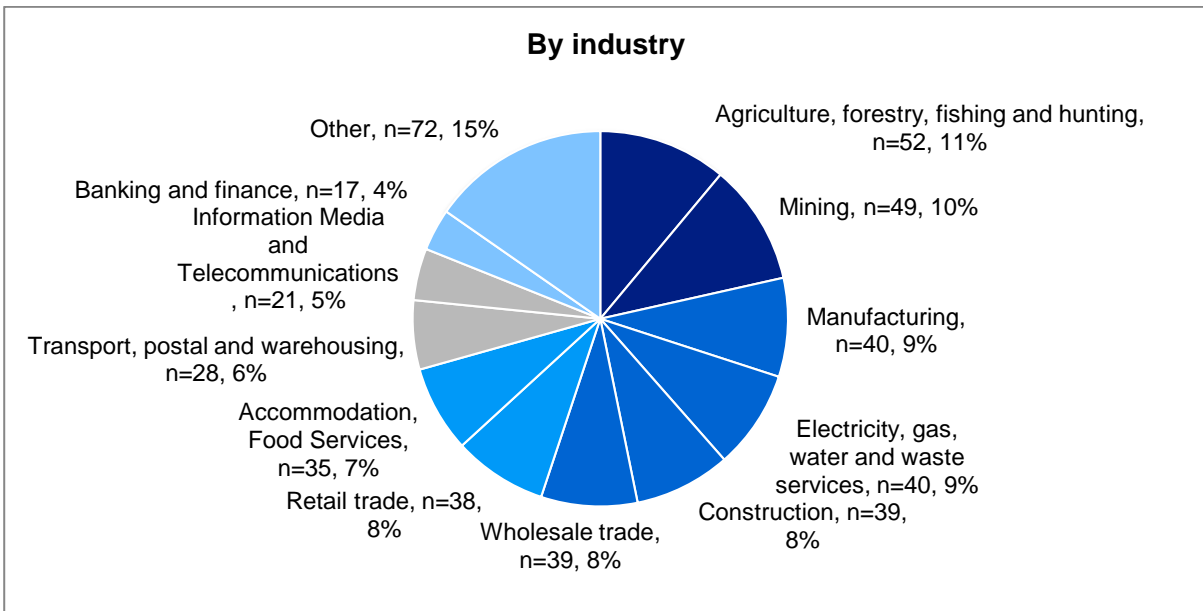
Respondent profile

Figure 14: Respondent profile by businesses size



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

Figure 15: Respondent profile by businesses industry



Source: Telsyte Telstra Track and Monitor Study 2019; Source: Telsyte Telstra Track and Monitor Survey 2019; n=470

About Telsyte

Telsyte is Australia's leading emerging technology analyst firm. Telsyte analysts deliver market research, insights and advisory into enterprise and consumer technologies. Telsyte is an independent business unit of DXC Technology. Visit www.telsyte.com.au for more information.

About Telstra

Telstra is Australia's leading telecommunications and technology company, offering a full range of communications services and competing in all telecommunications markets. In Australia we provide 18.3 million retail mobile services, 3.7 million retail fixed bundles and standalone data services and 1.4 million retail fixed standalone voice services. We believe it's people who give purpose to our technology. That's why our purpose is to build a connected future so everyone can thrive.

That's why we build technology and content solutions that are simple and easy to use, including Australia's largest and fastest national mobile network. That's why we strive to serve and know our customers better than anyone else – offering a choice of not just digital connection, but digital content as well.

And that's why we have an international presence spanning over 20 countries. In the 21st Century, opportunity belongs to connected businesses, governments, communities and individuals. Telstra is proud to be helping our customers improve the ways in which they live and work through connection.

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