



Fleet adaptability in a changing world

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Discussion Paper
November 2021

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Introduction

By 2050, fleets will have evolved into something unrecognisable from today. Fleets at the vanguard of this change are already moving away from traditional fleet models and dedicated company cars. Instead, they are embracing newer, more flexible fleet management solutions that challenge conventional views. So, what are these businesses doing? Carpooling, rentals by the hour and other solutions that focus on Mobility as a Service (MaaS) are reducing costs and reducing environmental impacts.

These trends will only continue influencing future fleet management. As internal pressures for performance gains build, they will be accompanied by technological advancements giving fleet managers greater control and flexibility than ever before. In this paper, we share our perspective on emerging dynamics shaping fleets, how different sectors are rethinking fleet management and steps other forward-thinking businesses can take to remodel their fleet to suit an evolving business landscape. As Australia's fleet leasing specialists, we have developed the insights in this paper as a result of decades of experience working with scores of clients.

"This paper provides a snapshot in time, exploring the exciting new dynamics transforming the way Australian businesses imagine their future vehicle requirements."

Reggie Cabal, ORIX Australia
CEO and Managing Director

Fleet management in an ever-changing world

In Australia today, a fleet car is typically a passenger or light commercial vehicle on a fixed-term lease of 36 to 48 months with built-in running costs and maintenance. While this fixed-cost model gives a degree of certainty, it locks the business into a contract, with a cost adjustment for returning the vehicle early.

Similarly, businesses that buy vehicles outright face cash flow pressures and limit their ability to change their fleet's composition to reflect their needs. Both scenarios can lead to passenger vehicles, light commercial and trucks sitting idle. A best-practice fleet can translate its fleet requirements into a solution that balances flexibility with availability to suit the business environment.

Other long-term dynamics are also changing how fleet managers optimise their operations. With this in mind, here are five trends that will continue influencing future fleet management.

Top five fleet trends

1. The rise of Mobility-as-a-Service

The Mobility-as-a-Service (MaaS) model focuses on service, not the asset. It allows users to select different mobility solutions to suit changing requirements. Fleet managers deliver users a range of options, including short-term rentals and peer-to-peer, car sharing services and micro-mobility services like e-scooters and bicycles.

Delivered as a monthly subscription or a pay-as-you-go service, MaaS gives fleet managers and staff the flexibility to access more practical and timely mobility solutions.

In this scenario, drivers are allocated a travel allowance and given the option to select the mode of transport that suits them on any day. This is managed through centralised software, providing fleet managers complete oversight of their diversified fleet and how staff use vehicles. This information delivers immense potential for fleet managers to rationalise and optimise their fleet, resulting in lower costs and better vehicle utilisation.

Public policy already supports this model in some jurisdictions. For instance, in 2019, the Belgian government was the first in Europe to introduce a mobility budget¹ to reduce the number of company cars by a quarter. The budget allows employees who have, or are entitled to, a company car to receive an annual mobility budget equivalent to the entire annual cost of their corporate vehicle. That budget can be spent on various mobility modes – such as a replacement 'green' car, a bicycle, a moped, carpooling, taxis or public transport – to give employees a more environmentally conscious commute. Employees can spend the money on housing costs if they live within a five-kilometre radius from their normal place of employment.

2. Autonomous and driverless vehicles

Road rules currently prevent driverless or autonomously driven vehicles from being used on public roads in Australia. They are, however, already widely used in mining and other industrial operations on private roads. Autonomous vehicle benefits include lower maintenance costs as they operate within original equipment manufacturer (OEM) preferred parameters, with reduced headcount and salaries, and heightened efficiencies given they can work around the clock.

State laws will need to be amended before autonomous and driverless vehicles are widely adopted in Australia. While there is some movement in this area, a lot more work will need to be done by state governments before autonomous and driverless vehicles can be adopted more broadly.

'States across Australia are conducting autonomous vehicle trials. Aside from successful trials and updated regulations, road infrastructure will also need to be updated so vehicles can communicate with infrastructure line markings,' says Mace Hartley, Executive Director, Australasian Fleet Management Association.

State governments across the country have trialled autonomous vehicles², with South Australia and Western Australia having trialled autonomous shuttle buses. State governments have been given special dispensation from a legal perspective to run these trials.

It's also worth noting many cars already have autonomous features, especially those with five-star ratings. These include lane departure warning systems, object detection and emergency brake assist.



Funded by the Federal Government's Smart Cities and Suburbs program, the City of Newcastle tested an autonomous shuttle bus in June 2020.

3. The shift to electric vehicles

Sales of electric vehicles (EVs) in Australia doubled in early 2021 versus 2020³, albeit from a very low base, with 588 vehicles sold in January and February 2021. Fleet managers, often at the behest of C-level executives and boards, are increasingly exploring how electric and hybrid cars can help meet their needs, in part to support sustainability goals.

Many hurdles need to be overcome before EVs are more widely adopted domestically. Cost is one, with models still more expensive relative to their petrol and diesel peers. For instance, the MG ZS retails from \$21,990 driveaway, whereas the MG ZS EV starts from \$44,990 driveaway at the time of writing⁴. Higher purchase costs are in part offset by lower running costs, with an EV costing 4 cents per kilometre in electricity, versus 14 cents per kilometre in fuel costs to run a petrol-powered car, according to the Electric Vehicle Council⁵.

4 cents

Cost per kilometre to run an EV compared with 14 cents per kilometre for a petrol-powered vehicle.

\$16.5m

Committed by the Australian Government, via the Future Fuels Fund, to pay for fast charging EV stations nationwide.

'Range anxiety' – the fear the car will run out of power before it reaches its destination – is another issue to be overcome before EVs are widely adopted. This will be addressed once car batteries have improved to the point that EVs can travel for at least 500 kilometres before charging. In the meantime, hybrid cars that use both petrol and battery power may be an attractive alternative for people concerned about range anxiety.

A lack of charging station infrastructure is another limitation to the mainstream adoption of EVs, with a critical mass of charging stations yet to be achieved. Specialist operators are rolling out charging station networks around the country. A \$16.5 million federal government grant scheme to fund EV charging stations announced in February 2021 could help close this gap⁶. Related issues include existing fuel cards incorporating electric charging⁷ and employers provision of home charging stations and/or reimbursing staff for energy costs associated with charging their work EV at home.

There are other dynamics at play that will determine the future of EVs in Australia. Government policy is one, particularly considering some recent shifts in this area. The Victoria state government recently announced a Zero Emissions Vehicle Subsidy, which will help reduce the upfront cost of buying an EV. The subsidy will be available to Victorian residents and businesses with premises in Victoria. At this stage, the subsidy is only available for cars purchased through dealerships⁸. Victoria has also introduced a charge for EVs, to compensate for the fact they don't pay the petrol excise⁹. NSW plans to introduce a similar charge in 2027¹⁰.

Actions by car manufacturers form another barrier to the widespread adoption of EVs. Some car manufacturers are reluctant to commit to rolling out EVs in this market given the federal government and most state governments are yet to fully articulate policies regarding EVs or indicate whether they will be prepared to offer incentives in this area.

“The fact Australia doesn't have an emission reduction target is one reason why there's no rush to bring EVs here.”

Mace Hartley, Australasian Fleet Management Association
Executive Director

Globally, however, many manufacturers have committed to greatly increasing the number of EVs in their range; Jaguar is promising to go all-electric by 2025 and Mazda, Mitsubishi and Nissan committing to net-zero carbon emissions by 2050¹¹. This may limit petrol and diesel car availability and force fleet managers' hands towards adopting EVs.

A final consideration when it comes to EVs: while a petrol car has a typical fleet lifespan of around 150,000 km, an EV's lifespan is much longer, with some sources claiming car batteries may last up to 20 years¹². This may be curtailed by new safety standards rendering EVs obsolete before the end of their battery life, although this could be resolved by potentially retrofitting cars to comply with new standards.

4. More sophisticated use of technology

Fleet management software, hosted in the cloud, gives businesses operational and performance fleet data in one consolidated view. Data is captured from multiple devices and providers – compliance, fuel, maintenance, parts, downtime and other telematic details – to improve safety, transparency and cash flow.

Data and insights produced by telematics software help ensure fleets are as efficient as possible. Only 15 years ago, fleet managers like ORIX Australia would collect just four to five data points per vehicle per annum, primarily related to transactions like registration, repairs, maintenance or tyre replacement. With the introduction of fuel cards, data points increased to 100–150 data points per vehicle per annum. Now, for fleets fitted with In-Vehicle Management Systems (IVMS), ORIX can collect up to 15 million data points per annum for a fleet of 300 vehicles. This information helps fleet managers optimise vehicle use, leading to lower costs, better usage and improved environmental outcomes.

A challenge, however, is making the most of this data. The information generated by these systems is still often held in separate silos in IVMS, by telcos and in fleet management organisations' (FMOs) and companies' internal systems. FMOs like ORIX Australia help bring these disparate sources together and gain meaningful insights from this data, which helps fleet managers to optimise their operations. In the future, blockchain technology is also likely to help break down information silos, offering a way to share data in a controlled and transparent way. Blockchain could give all parties in the chain, from manufacturers to customers, better oversight of vehicle production and delivery.

5. Supply challenges

Supplies of new vehicles, especially utilities, have been severely compromised since early 2020 for several reasons. The pandemic's constraints on global supply chains due to border closures and lockdowns made it difficult to bring vehicles into Australia. Related disruptions to the global vehicle-manufacturing supply chain also impacted the supply of parts, particularly for semiconductors.

Dealerships could be a casualty of the changing supply chain, becoming disintermediated as fleet managers deal directly with OEMs. Fleet managers are likely to go directly to vehicle transport operators, who arrange vehicle transportation from OEMs, fit them out to customer specifications and register and deliver them.

It's worth noting that many businesses paused their vehicle replacement cycle last year in response to the pandemic curtailing staff movements. This is likely to result in a much higher demand for vehicles this year. Car manufacturers have adapted their production cycle in response and are expected to meet this demand. However, it could mean that fleet managers may switch from relying on one or two car manufacturers to maximise volume discounts for their fleets, to securing cars from many suppliers to meet their immediate requirements.

Fleet response by sector

Different industry sectors are embracing fleet trends in different ways. Here, we examine three sectors' approaches.

Mining and resources sector

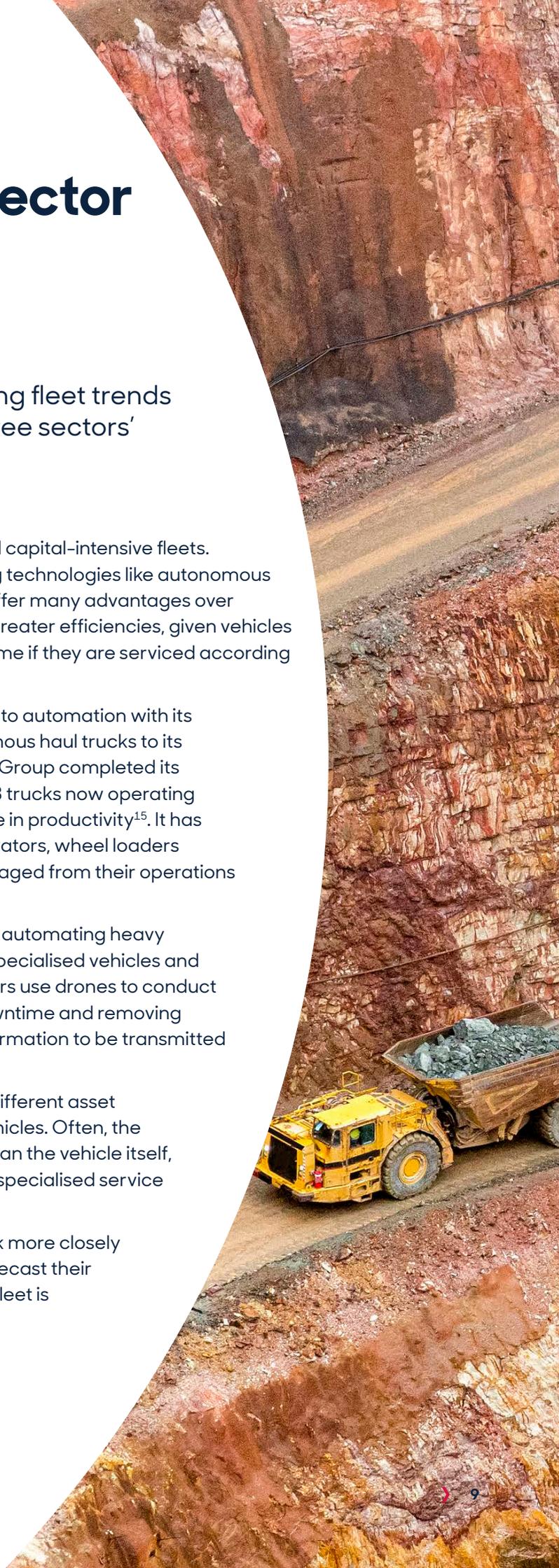
The mining and resources sector has traditionally used capital-intensive fleets. However, mining companies are increasingly exploring technologies like autonomous vehicles to enhance their operations. These vehicles offer many advantages over driver-operated vehicles, including better safety and greater efficiencies, given vehicles can be operated around the clock with far less downtime if they are serviced according to their specifications.

Rio Tinto was one of the first mining companies to shift to automation with its Mine of the Future initiative¹³, introducing fully autonomous haul trucks to its operations in 2018. In October 2020, Fortescue Metals Group completed its Chichester Hub autonomous haulage project, with 183 trucks now operating at two company hubs¹⁴, delivering 30 per cent increase in productivity¹⁵. It has also introduced 900 automated assets including excavators, wheel loaders and light vehicles into their existing fleet, centrally managed from their operations centre in Perth¹⁶.

While the mining and resources sector has focused on automating heavy vehicles, it's increasingly using autonomous light and specialised vehicles and other emerging technologies. For instance, some miners use drones to conduct land surveys and asset inspections, reducing mine downtime and removing staff from dangerous environments while allowing information to be transmitted via satellite to the base or head office.

It's worth noting that autonomous vehicles have very different asset build specifications compared to traditional mining vehicles. Often, the specialised equipment they carry is more expensive than the vehicle itself, so safety security is paramount. Servicing, often using specialised service providers, is critical.

Mining and resources companies will likely look to work more closely with their fleet management partners to help them forecast their future needs and trial different options to ensure their fleet is optimised for the future.



Construction and infrastructure sector

Around 70% of Australia's emissions are associated with construction and infrastructure projects¹⁷, largely attributed to the sectors' ongoing use of transport and energy sources to build and maintain projects. Not surprisingly, construction and infrastructure companies are increasingly being asked to demonstrate best practice sustainability operations to win, and then complete projects. Many, like Lendlease and Laing O'Rourke, have publicly announced ambitious sustainability targets. Lendlease has set a target of net zero carbon emissions by 2025¹⁸. Laing O'Rourke is working towards a 75 per cent reduction in carbon emissions by 2030¹⁹.

70%

Construction and infrastructure sectors produce around 70% of Australia's total carbon emissions.

These targets have led to a sector wide trend toward exploring fleet options that reduce emissions without impacting operational capability. Many organisations are actively planning for the introduction of low emission vehicles such as hybrid and EVs into their fleets. Hybrid powertrains are increasingly used in excavators, bulldozers, loaders and trucks. Combining the latest energy-efficient diesel engines with hybrid technology can deliver large fuel cost-savings and reduced emissions²⁰.

Case study

A fleet that's fit for purpose

Infrastructure consulting firm AECOM's fleet size depends on the projects under management, with the number of vehicles varying from 80 to 120.

About 60 per cent of its fleet comprises pool vehicles, which are based at its offices and available to be booked by staff to attend client meetings, site visits and inspections. The remaining 40 per cent of its fleet are site-specific project vehicles, such as utes, allocated to individual drivers to deliver a specific project. These vehicles are ordered on a case-by-case basis, depending on the business's requirements.

Over time, AECOM has consolidated its fleet and reduced its reliance on pool vehicles, especially in locations with expensive parking.

Hybrid vehicles have been included in AECOM's fleet in the past; now they're exploring the potential for EVs to help meet sustainability goals.

Safety is a huge focus for the business. It has recently introduced a new telematics system that uses an electronic booking platform and real-time data around vehicle use, allowing AECOM to make better decisions about vehicle use and leasing needs. This assists with electronic logbook management and reporting fringe benefits, as well as driver safety and behaviour.

Transport sector

Transport service models supporting e-commerce are being driven by buyer behaviour. Today, retail and business customers expect ever faster and more flexible delivery options along with exemplary service at a low or non-existent delivery cost. This has put pressure on the transport sector to innovate or risk becoming obsolete.

As a result, a range of technological solutions have emerged to drive efficiencies and lower costs. These include data analytics and automated scheduling as well as consolidated deliveries from multiple shippers.

The growth of online shopping means logistics operators will need to increase the number of light commercial vehicles in their fleets to cope with a greater number of deliveries. Other trucking businesses are likely to increase the sizes of the vehicles they operate to deal with larger loads. However the future unfolds, delivery fleets will need to be inherently flexible.

In the future, ridesharing will likely be extended to other transportation forms, such as shipping and trucking, enabling businesses to take advantage of ridesharing services and apps that let them track trucks nearby and book directly with one click.

This could prompt the sector's fragmentation, especially among major third-party logistics businesses and warehousing hubs. New and innovative operators may enter the market and challenge the established business model.

Regarding safety, logistics businesses rely on IVMS to generate driver behaviour data from which insights can be used in driver training programs. IVMS can also help identify potential issues, such as a flat vehicle battery, helping prevent trucks from breaking down in remote areas.

While it will be some time before autonomous or driverless trucks are common on our highways, they may offer many advantages when they do hit the road; for instance, travelling across state lines if borders are closed. They also circumvent issues like driver fatigue and driving while impaired, resulting in the more efficient movement of goods and increased road safety cross-country.

Although autonomous vehicles on our roads may be some way off, fleet managers are encouraged to factor this into future planning.

Case study

Corporate carpooling in action

Family Life, a Victorian not-for-profit organisation, sought to reduce its fleet costs and use its vehicles more efficiently as part of its COVID-19 response. Their objectives included reducing administrative burden, as their fleet was mostly managed manually using spreadsheets and online calendars.

Starting with 29 vehicles over five locations, ORIX's review of Family Life's fleet usage resulted in a 41 per cent reduction in fleet size. The organisation also introduced ORIX Share, a centralised booking platform, enabling staff to book pool vehicles online and ensuring better utilisation. The reduction in fleet size, coupled with the booking platform, has enabled Family Life to substantially reduce vehicle costs over the life of the contract. Apart from the obvious benefits of cost saving, this will result in them being able to redirect that investment to the provision of vital community services.

Five step fleet action

As the past 18 months have shown, fleet managers need to factor in an element of uncertainty and disruption in their planning. The following five-step action plan may help define a business' mobility strategy, regardless of the sector or business size.

Be flexible

Use data about the existing vehicle fleet to guide planning for future fleet needs. Consider combining long-term leases with short-term rental options to right-size the fleet depending on what's happening in the business.

Cost containment

Review fleet operating costs and understand how much capital is tied up in vehicles. Identify the vehicle count across the fleet and the true total cost of ownership (TCO). Add up variable costs, fixed costs, operating costs and hidden costs like company vehicles used for personal use and taxi allowances.

Break costs down per asset, even to cost per kilometre. This will form the basis for decision-making.

Trim the fat

Consider disposing of or reallocating surplus or underutilised vehicles. Consider monetising vehicles owned through a sale and leaseback deal with a FMO to free up business capital. Reconsider future long-term vehicle commitments and explore on-demand rental vehicles that allow the business to scale their fleet needs up and down to reflect changes in the operating environment, especially if there are cash flow constraints.

Think like a start-up

All businesses can act like start-ups. Think of a fleet as a diversified portfolio, not just a single hard-and-fast policy. Futureproofing the fleet will help get the best use from this investment, minimising underutilisation and reducing costs.

Draw on expert insights

Work with a FMO to build a fleet that's fit for purpose and cost-effective, and makes the most of the business's resources.



About ORIX Australia

Since 1986, two attributes have pointed the way for us to become and remain leaders in vehicle leasing, rental and fleet management.

ORiginality and **flex**ibility. That's what makes us **ORIX**.

We're in the business of moving people, and products, from A to B more simply, safely and cost-effectively. By working together we can find flexible solutions to help you better navigate the road ahead.

Our innovation mindset has been recognised by the Australian Financial Review, the Workplace Gender Equality Agency and the Human Resources Director.



Working together starts here.

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