

Looking to 2035:

TECHNOLOGY IN
AUSTRALIAN REAL ESTATE

APRIL 2023

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Executive Summary

The [EIU 2022](#) ranked Melbourne as the top Australian city for liveability (10th in the world, with Sydney ranking 13th, Brisbane 27th, Adelaide 30th and Perth 32nd).

The development of the Australian real estate industry greatly impacts liveability – defined by the [Australian Urban Observatory](#) as “safe, socially cohesive, inclusive and environmentally sustainable communities. They have affordable housing linked via public transport, walking and cycling infrastructure, to employment, education, shops and services, public open space and social, cultural and recreational facilities.”

Although Australia is generally considered to be a highly liveable country, there are several challenges that could impact its liveability in the future. Infrastructure in Sydney, Melbourne, Brisbane and Perth is [failing to keep pace](#) with rapid population growth, particularly on the urban fringe. Ageing assets are under growing strain, with rising road congestion, crowding on public transport and growing demands on social infrastructure, such as health, education and green space.

Flexibility, optimisation and an ESG-focus are central themes across the various asset classes. For the future of work, hybrid working is expected to become the norm, letting employers and employees find a sustainable way of working whilst maximising productivity and placing a greater focus on holistic wellbeing. Organisations are moving to more ESG-friendly buildings and efficiency is maintained through smarter building management systems.

With the rise of e-commerce and omnichannel strategies from retailers, there is an increased demand for specialised logistics spaces. Retailers will have to carefully consider their floorspace usage with the rise of micro-fulfilment business models, whilst making full use of automation, multi-level warehousing and temperature control. Their rapidly evolving business models mean that they need to be agile, with the ability to adapt based on seasonal demand.

Residential real estate is also expected to transform, with the increased servitisation of accommodation – as people demand flexibility, there will be an increase in the number of serviced apartments, shared accommodation and short-term leases. Technology will enable more affordable housing through prefabricated components and building information modelling (BIM). As our homes become an extension of our smartphones, smart home devices spanning security, outlets, lighting and home entertainment will become increasingly commonplace.

Technology will play a large role in changing and improving upon existing systems. However, making technology part of everyday use takes time, both on a commercial and consumer level. It is a balancing act that requires both state and private corporations to invest into, not only funding research and development, but also city or countrywide infrastructure that existing and new real estate will build upon. Organisations will have to be mindful of the acceptance of change from previous industry practices.

Offices

Overview

Technology has permanently impacted the way people and businesses work; in Australia, like much of the rest of the world, people have become accustomed to hybrid and flexible working arrangements. Hybrid working is expected to be a permanent change to the way Australians work — [JLL's Workforce Preferences Barometer 2022](#) revealed that hybrid working was expected by 60% of office workers, and 55% were already doing so. Australians are also seeking hybrid work arrangements more than their international peers ([55% of local respondents](#), compared with the international average of 43%).

Office spaces have to adapt — tenants are upgrading their offices for one that is either smarter with more facilities, or a more convenient location. These are an effort to maintain or increase productivity levels, optimise space usage within the offices and work towards their ESG-mandates.



60%
of workers
expect
hybrid
working

Smart Offices

Attracting office tenants has become increasingly difficult – as companies continue to embrace hybrid working and streamline their staff, offices have found specific points of differentiation. Aside from location, the offices themselves are becoming increasingly “smart”. “Smart” technology has long-infiltrated residential spaces, the most well-known arguably being Amazon’s Alexa and Google Nest. These technologies have now migrated towards commercial properties.

Office spaces are now more connected, interactive and responsive to the needs of employees. For example, smart office technology, such as sensor-based lighting and temperature control systems, can help create a more comfortable and personalised work environment. The growth of the Internet of Things (IoT) and the increasing use of connected devices in the workplace may lead to the development of new tools and services for office management and maintenance. IoT-based systems could be used to monitor and control office equipment, such as printers and copiers, as well as automatically order supplies when they are running low.

The use of artificial intelligence (AI) in the workplace may lead to changes in the way that offices are designed and managed. For example, AI-powered systems could be used to analyse employee behaviour and preferences to help optimise the layout and design of office spaces, or to provide personalised support and assistance to employees in real time.

From the building managements' point of view, IoT will transform building management systems; they can track and manage heating and cooling systems, install sensors, smart doorbells, security cameras and more. Moreover, these systems are intelligent as temperature management systems can automatically adjust to weather and building occupancy, while security systems have touch-free identification features. With recent high profile data breaches from companies including Medibank, Optus and Latitude Financial Services, there will also be an increasing emphasis on the security of personal data. Providing this confidence will be key in achieving the benefits of smart buildings.

Company decision makers must cater to both the building managements' as well as employee demands, which include more energy efficient spaces that reduce electricity costs and meeting their ESG requirements. According to CBRE's NABERhood Watch Report March 2022, 24% of all office buildings constructed pre-2000 that now have 5.5 or 6-Star energy ratings have an 11% higher occupancy than their 4-Star or less counterparts. In a Melbourne suburb, landlords have even offered free electricity for their tenants, powered by solar panels on the roof of the building.

On the other hand, office-goers favour offices with amenities like automated sanitation for high traffic areas, UV air filtration technologies, e-bike availability and EV charging stations. Although electric vehicles make up only 3.39% of all Australian new car sales in 2022, it represents an increase in demand of of 65% and is expected to continue growing.

Similarly, e-bikes and e-scooters are expected to be adopted nationwide within the next decade, as a casual mode of transportation that make a great alternative to cars for last-mile or first-mile problems. Office buildings that have dedicated infrastructure for these new modes of transportation, including subscription-based services for tenants, will make commutes to the office even more convenient.

The Challenges

There are a number of challenges to the implementation of smart building projects, with the most prevalent barriers being insufficient government policies, resistance to change, need for specialists and higher construction costs. Some of these challenges are addressed to an extent in the Australian government's Smart Cities Plan from 2016, which outlines a holistic plan for the future of their cities. There are also other initiatives and funding (\$28 million) for digital building solutions research.

Existing building owners are faced with the upfront cost of updating their buildings with new IoT devices that will enable all the benefits mentioned above. For example, smart building infrastructure is more costly, as network resilience through upgrades come with high implementation and operational costs. Combined with the need for specialised professionals to ensure the appropriate selection of devices and provide technical assistance, implementation is delayed due to the necessity of smart-building technology knowhow. It is a multi-team effort, with coordination between owners, architects and contractors to find the appropriate locations to install these devices, calculate how many are required and actually install them.

The transition from existing building management systems to a “smarter” one is also hurdle, as management is often resistant to change and must learn how to use it. Smart building management is an area we expect to see subscription-based services being utilised, with a growing market for agencies who specialise in the service, so that property developers do not have to pay upfront implementation costs. These types of outsourced digitisation businesses will see increased interest as their expertise is needed. Smaller developers may also seek a first-mover advantage in smart buildings, as they are more agile in changing processes and best-practices.

The New Office & Commute

Employees are demanding flexibility and companies need to offer solutions that work for both businesses and workers. One example of this is the “hub and spoke” model – one central office hub with satellite offices for employees to have a choice to work at. This provides employees the choice to go to an office close by that “earns the commute” and can be used for engagement and productivity when needed. However, this is only one of the numerous options employers are considering with their workplace strategies, as a well-constructed hub-and-spoke model should be easily managed. This is often dependent on context, like the nature of the business, number of employees,

and neighbourhoods they live in, in order for the satellite offices to be intentional, central places to collaborate and connect with co-workers. A post-pandemic trend has also seen the spoke for many employees being their own homes.

Overall, office spaces should be adaptable to accommodate different types of work. Examples are collaborative team-based projects, individual focus work and remote or flexible working arrangements. Flexibility is not limited to being in-person, remote or hybrid, but also encompasses each individual's ability to have the choice to do what works best for themselves and their team. This is whilst providing important aspects of a

workplace like developing intra-company relationships with members from other teams. Combined with the growing emphasis on the health and wellbeing of employees, this is leading to the development of office spaces that are designed to promote physical activity, natural light and a healthy working environment. Finally, the increasing use of technology in the workplace is also driving the development of office spaces that are connected, responsive and equipped with the latest tools and services. To meet these changing requirements, office designers and developers will need to innovate, working closely with their clients to understand their unique needs and preferences.

Compared to the traditional CBD office, de-centralised office hubs have numerous

benefits – location convenience, easy commutes, cheaper rent and increased space for diversity in work typologies and amenities. Some companies are consolidating into smaller but higher quality, green-certified spaces to reduce costs. Amenities they look for include fresh air, gardens, greenery, cafes, open-air and WiFi- enabled plazas, EV chargers and e-scooters or bikes, all accessible by foot and shared by the community.

Wellness is being incorporated into new workspaces, which can be measured through NABERS and WELL ratings. An example is Albert Park Office and Depot, which lies in a Melbourne suburb combining sustainability and open spaces with work.

50 Miller St., North Sydney



Interview with CBRE Australia

Commercial real estate and investments

Jenny Liu | Head of Change Management

Thomas Biglands | Research Manager

Stevie Collins | Associate Director - Office Leasing, Sydney CBD

1

What are trends that you are seeing occur in the office space in terms of tenant requirements?

As organisations are increasingly focused on their ESG credentials globally, this is reflected in the occupier's office as they lean towards new and ESG compliant buildings that can also offer the level of wellbeing amenity to employees as they encourage their staff to work more often in the office. Moreover, 80% of tenants in Sydney in H2 2022 were considering A-grade office options and upgrading their space.

We expect premium and higher quality buildings to perform more resiliently as a result and can see increased consideration of access to fresh air through open third spaces and operable facades in new developments.

2

How has hybrid working changed tenant demands for office spaces?

The use of office spaces has definitely changed with the vast majority of companies implementing some form of hybrid work. In Australia, there is frequently a high degree of choice of which days given and this has certainly resulted in higher occupancy Tuesday, Wednesday and Thursday. While many companies are evaluating their space needs as part of future workplace strategies or lease renewals, this reduced demand doesn't always result in reduced space or reduced rent. There is a definite trend to higher levels of space per person to provide more collaborative and focus spaces, and a better overall experience, as well as a trend towards more premium spaces to attract employees back to the office.

Hybrid work models are a spectrum – from office-first, to blended and virtual-first. This has influenced the design of office spaces, as office-first workplaces focus on well-rounded productivity, blended work focuses on team collaboration and virtual-first work spaces are built for community-building events. 60% of our managed accounts are revisiting design standards and of those, 70-80% are redesigning collaborative spaces.

3

Are there specific technological features that tenants ask for?

The biggest issue we see by far with technology is the request for simple, seamless and easy to use technologies. Typically consumer technology such as phones or tablets are easier to use and more powerful than many systems built into workplaces. That said, many companies are looking to standardise their technology for better consistency and service, and to provide simpler Bluetooth or WiFi-driven meeting technology with high quality audio.

Desk booking systems and occupancy management technologies are also gaining in popularity, although the cost of sensors is still high enough that most companies are not looking at tracking live occupancy yet. This is likely to change in the future. Technologies provided by the landlord such as smart buildings with on-demand lifts, better energy usage and building apps for everything from booking space or gym sessions to ordering coffee are also desirable, contributing to the demand for premium buildings.

111 Alinga St., Canberra



Key Takeaways: Offices

Flexibility as a way to optimise productivity

As the way people work has changed and hybrid working is here to stay, technology is the key to creating productive workplaces. This includes smart office buildings and spaces that optimise energy usage, meeting rooms and hot-desk usage.

Flexibility is also considered in the way offices are designed, to be office-first, blended, or virtual-first. The nature of each company differs based on the industry and individual preferences.

ESG has become a priority for companies

Sustainability and wellness are central pillars in their ESG strategy, leading businesses to choose spaces which have higher NABERS and WELL ratings, green, open spaces and other amenities that enable workers to work outdoors (wifi-enabled plazas, etc.).

The office location is also an important consideration, as more transportation options (car, public transport, e-bike/scooters, cycling and walking) are increasingly adopted.

117 Harrington St., Sydney



Retail & Logistics

Overview

The Australian logistics market was valued at \$114 billion in 2021 and it is expected to reach \$161 billion by 2027, registering a CAGR of 5.85% during the forecasted period of 2022-2027. Monthly and quarterly estimates of turnover and volumes for retail businesses (food, household goods, clothing, department stores, cafes, restaurants, online and more), including store and online sales all showed consistent upward trajectory. Major logistics companies include FedEx, Toll, Linfox and DHL, while the top online retail marketplaces are eBay, Amazon and Kmart.

The increasing use of e-commerce and omnichannel retail may lead to changes in the types of retail properties in demand, as well as the way that they are designed and managed. There will likely be a greater emphasis on specialised fulfilment centres and distribution hubs, rather than traditional brick-and-mortar stores. Logistics spaces need to be more flexible and agile, implementing the use of robotics, advanced data analysis and predictive algorithms to optimise the flow of goods and services, such as forecasting demand and adjusting supply chain operations. The proximity of distribution centres to residential areas will also be minimised, as consumers demand convenience and micro-fulfilment centres pop up in every neighbourhood. This can help improve efficiency and reduce waste, leading to cost savings for retailers and logistics companies.

\$161bn

value of the
Australian
logistics market
in 2027

Omnichannel Retail

In omnichannel logistics, formally siloed sales channels converge to deliver goods more effectively whilst improving the consumer experience. It combines the benefits of online shopping with traditional retail and other physical or digital touchpoints. The shift in logistics trends linked to the pandemic is putting pressure on distribution networks to implement greater efficiencies. As of 2020, 26.5% of Australians shopped online once a week, as compared to China, South Korea and India, where more than 45% of consumers shopped online once a week. This highlights the potential of e-commerce growth in Australia, as well as how traditional distribution networks need to implement new technologies and supply-chain methods to meet capacity pressures and manage costs. Stores will have different layouts than they have traditionally, they may want to allocate more backroom space to fulfil online orders, have less cashier space due to self-checkout and have a dedicated returns section.

26.5%

of Australians shopped
online once a week
(2020)

25%

of floorspace is leased
by e-commerce
occupiers (Q3 2022)

58%

of leasing transactions
were from e-commerce
related sectors (Q3
2022)

E-commerce related occupiers have accounted for 25% of floorspace leased in Q3 2022, with the concentration of activity from the transport, postal and warehousing occupiers. These sectors contributed 58% of leasing transactions over Q3 2022, which is in line with historical demand trends. Historically, an average of 1.4 million square metres of warehouse space was delivered to the Australian market annually since 2010, with estimates that new supply will need to be increased by approximately 35% to keep up with e-commerce growth. Overall, industrial and logistics spaces saw supply shortfalls and rents continued to climb across Brisbane, Adelaide, Melbourne, Sydney and Perth.

Logistics and retail real estate are increasingly intertwined, which requires flexibility and adaptability to accommodate a range of activities including in-store shopping, fulfilment, distribution, returns and customer service. Omnichannel retail also requires the development of technology and systems that can support the integration of online and offline channels. These are real-time inventory management across store networks and warehouses, cross-channel payment and shipping options, and personalised customer support.

Logistics Solutions: Specialised Warehousing

Specialised warehousing is growing in Australia, referring to the development of facilities that are designed to support specific types of goods or activities, such as cold storage, hazardous materials, or cross-docking. These facilities can help improve the flow of goods and services, and can reduce the amount of time and resources that are required to store, manage and distribute products. In addition, specialised warehousing can also help improve safety and compliance, by providing secure and controlled environments for the storage and handling of specific types of goods.

Another type of specialised warehousing is the use of automation – robotics and software will be able to best organise stock for storage and delivery, complemented by automated warehouse utility vehicles which are likely to be electric and can easily navigate the warehouse through IoT. Increased automation will also change the way warehouses are designed in terms of layout, making them more compact as they are optimised for robotic pickers instead of humans. As the largest variable cost for logistics are workers, automation can cut labour costs whilst simultaneously reducing floor space by storing items vertically. These spaces are expected to be connected, responsive and equipped with the latest tools and services, and accommodate a range of activities including fulfilment, distribution and customer service.

The growth of the sharing economy and the increasing popularity of on-demand services may lead to changes in the way that retail and logistics properties are used and valued. For example, instead of owning a warehouse or distribution

centre, companies may opt to rent or share a space in a larger, multi-tenant facility. We expect to see an increasing number of warehouse software services, for subscription-based warehousing solutions that can manage fast moving goods and tenants who have short-term requirements. The subscription model is likely to face spikes and dips in demand annually, of which the seasonality aspect would require more complex solutions like dynamic pricing and customers from complementary industries.

Larger players often opt to build their own spaces, such as how Coles supermarkets built two highly automated, multi-temperature customer fulfilment centres in Melbourne and Sydney [in 2020](#). This centralised approach enabled faster delivery times whilst they implemented their subscription service ‘[Coles Plus](#)’ that provides free delivery over \$50, among other benefits.

Growing demand for multi-level warehousing

The combination of a shortage of large sites and high land values across numerous Australian markets has meant that developers have begun maximising the capacity of the site, through upward expansion. Multi-storey warehousing is commonplace across Asia but not in Australia. Building vertically increases the available floor space for occupiers, improving investor returns in the long run. For example, the tallest facility in Asia is Goodman Interlink, a 24-level industrial warehouse in Hong Kong, that was opened in 2012. Due to zoning constraints in Australia, developers are unlikely to be able to build to the same heights in the short-term but will be able to in the future.

Cold Chain Market logistics

Between 2022-2027, the Australian cold chain logistics market is expected to show an annual growth rate of more than 4.8%. Australia is one of the largest global players in exporting perishable goods, particularly the increased demand for beef and seafood. Other use cases include pharmaceuticals and other chemical industries.

Although the majority of revenue is done through Cold Transportation rather than cold storage, the number of cold storage facilities are expected to rise to meet demand. These facilities have greater complexity and costs associated with building and operating them compared with conventional dry warehouses, given the need for additional mechanical services and structural enhancements to ensure appropriate insulation.

Logistics Solutions: Micro Fulfilment

Micro fulfilment is increasing in popularity both globally and in Australia, as companies look for ways to improve the efficiency and speed of their e-commerce operations. Micro fulfilment refers to the development of small-scale, automated warehouses that are in or near urban areas and that are designed to support the last-mile delivery of online orders. These facilities can help reduce the time and cost of fulfilling online orders and can make it possible for retailers to offer faster and more convenient delivery options to their customers. Micro fulfilment can also help reduce the environmental impact of e-commerce, by reducing long-distance transportation and the associated emissions.

Previously designated commercial and residential areas have been very separate, but people increasingly have expectations for faster delivery from businesses like e-grocers and e-commerce. Warehouse locations will need to be interspersed between residential hubs and in every neighbourhood. This provides an opportunity for new but small developments in residential areas, or older warehouses in mixed-use urban areas to be repurposed, with the potential for lighter industrial use, first or last-mile purposes.

Demand for urban logistics facilities are led by grocery giants

Grocery retailers utilise urban logistics models as part of their e-commerce strategies, and often provide on-demand delivery for their online orders.

Woolworths began rolling out micro-fulfilment technology and automation for their eStore supermarket in Melbourne in 2020. More than 80% of Woolworths online orders are fulfilled by stores, shown through a 50+% quarterly growth (Q3 2021) in the online space, with online sales accounting for 11% of sales (Dec 21). They highlighted their speed and proximity for boosting the availability of same day deliveries, as the retailers' personal shoppers pick out products in the warehouse.

The micro-fulfilment strategy includes receiving an online order to packing it and offering last-mile delivery options. Micro fulfilment centres have two main components: software management systems that process online orders, and the physical infrastructure, including robots that pick out items from storage aisles and shuttle them to packing staff. One last mile delivery option is the use of micro freight or micro delivery, which are parcel deliveries done in light duty or personal vehicles, such as Task Rabbit or Uber.

Interview with Forbury

Commercial real estate valuation software

Scott Willson | CEO of Forbury

1

What are the challenges faced by real estate players that Forbury aims to solve?

Until now, commercial real estate professionals have typically developed their own spreadsheets to forecast cash flows, derive market valuations and inform investment decisions. This approach is flawed because spreadsheet development is effectively software development without any of the controls you would typically put in place to test new codes and manage development risk. The effect of spreadsheet errors is compounded in the commercial real estate domain where minor errors can be magnified due to the sums involved.

Forbury solves the problem with its cloud engine software and a familiar front-end in Microsoft Excel where we serve templated and industry-standard calculation sheets. This provides a consistent approach to determining asset valuations, handling complex tenant rent scenarios, and ensures customers are supported by our in-house team. It relies on industry-standard and industry-tested software, so customers have confidence in the modelling they undertake.

2

How does Forbury provide off-the-shelf property valuation software yet have customised valuation tools?

Forbury software is used in a variety of ways, the first is to conduct external valuations for financial reporting purposes. The second is informing investment recommendations to investment committees and asset managers looking to translate capital decisions. Because of the range of applications, various aspects of the software become more (or less) important it's not practical for Forbury to build custom sheets or workflows for each customer.

We provide an add-on package called Forbury Custom, which is a workflow technology allowing Forbury super users to craft their own sheets, perfect the look and feel, and maintain these in the latest version of the template models without relying on Forbury team members.

3

To what extent are “new” property requirements included in the valuation? For example, smart buildings, wellness facilities or transportation availability to an office building?

Commercial real estate investment modelling is an art form. It involves “abstracting” the physical features of a property into a set of parameters which can be used to forecast revenue and costs. Smart building tech and other amenities differentiate newer commercial real estate from the old impacts a commercial real estate investment model via a combination of the property financials and investment parameters.

The “property financials” include tenants, lease terms, base rents, rent reviews and operating costs. A property with an amenity that stands out would expect to have a healthy occupancy status and a quality set of tenants and lease terms. It may also have a lower cost to operate reflected in lower energy, building/maintenance, insurance costs (and others) relative to other benchmark properties nearby.

For example, the “investment parameters” have the capitalisation rate, renewal assumptions and market rents. In investment modelling, these parameters are typically assumptions and are determined by property investment experts based on many factors such as market conditions. But often they are also specific to individual properties and must take into consideration a degree of investor appeal. A modern property with smart technology would command a premium to a similar property on a like-for-like basis and the market would account for this in a lower capitalisation rate.

Key Takeaways: Retail & Logistics

Omnichannel strategies cause retail and logistics spaces to increasingly overlap, to optimise user experience

As e-commerce has grown and people increasingly purchase online, there has been a shift in the balance between warehousing and consumer-facing retail floorspace. Mobile apps that enable on-demand delivery of food or other items are a part of the sharing economy and increase the time pressure for items to be delivered.

Small but efficient distribution hubs are set up in not only central, urban areas, but also suburban neighbourhoods.

Specialised warehousing is used to improve efficiencies for specific business types and purposes

Businesses increasingly utilise a combination of different warehouse and distribution centre types to meet their needs. These include more technologically advanced spaces, such as temperature-controlled, multi-storey and automated buildings.

Automation can reduce labour costs whilst simultaneously have a more densely-packed warehouse, that are built for robotics instead of humans.

Piers 8/9 Walsh Bay, Sydney



Residential

Overview

Australia's housing affordability has broadly declined since the early 1980s. The OECD's price to income ratio index shows a 78% increase between 1980 and 2015, while overall household home ownership rates in Australia (including dwellings with a mortgage and those owned outright) have hovered around 70% since 1961. High housing costs are faced particularly in major cities like Sydney and Melbourne, resulting in Australians struggling to afford to buy or rent a home. The 2022 annual rental affordability index found more than 40% of low-income households were now in rental stress and struggling to pay for food, heating and healthcare.

Various types of technology will impact residential real estate for both potential buyers and industry professionals over the next decade, such as increasing housing affordability through prefabricated homes, or using home services. Homes will be more efficient using a combination of hardware and software, creating “smart homes”. PropTech ranges widely from virtual and augmented reality for property showings, to data analysis and predictive algorithms to help buyers and sellers make more informed decisions.

117 Harrington St., Sydney



Affordable Housing

Previously in Australia, there has been a misconception that modular or prefabricated homes are of inferior quality, which has been proven untrue with numerous buildings produced by prefab builders that are superior to traditional builds. These buildings are of high quality and look more expensive, whilst cutting costs considerably.

Modular construction and prefabrication represents just 3% of Australia's \$150 billion construction industry, as compared to Sweden that builds 84% of their houses using prefabricated elements. Significant progress can be made by using technology to create more affordable housing. For example, the use of prefabricated housing components can speed up the construction process and reduce costs, making it easier to build affordable homes. 3D printing technology and robotics could further reduce the cost of construction, and make it possible to build homes in a wider range of locations. There are also opportunities to make existing homes more energy efficient and affordable to maintain, which could help to reduce the overall cost of homeownership.

This is an opportunity for property developers to move to new planning methods – use of prefabricated building materials and software such as Building Information Modelling (BIM) can reduce the cost of construction, reduce planning times and expedite the paperwork process. The advantage of short construction timelines are even more lucrative beyond residential buildings, for public infrastructure projects including railway stations, schools, police stations and hospitals.

Home Services

The growth of the sharing economy and the increasing popularity of co-living arrangements may lead to changes in the way that residential real estate is valued and utilised by developers and building managers. For example, instead of owning a single-family home, more people may opt to rent or share space in a larger, multi-unit property. This could lead to changes in the types of properties that are in demand and the ways in which they are marketed and sold.

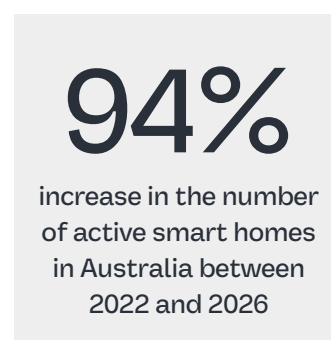
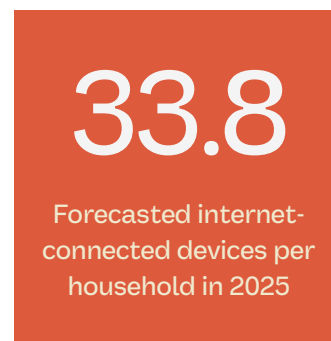
Stemming from student accommodation, the transition to housing in adulthood has spurred solutions in many forms, including shared accommodation, serviced apartments and short-term leases. The primary audience for these types of accommodation were initially single millennials, although it has broadened to include couples, families and other niche groups like short-term expatriates and “digital nomads”. Many of these solutions are designed to be flexible and more affordable, allowing people to live and work in a way that suits their individual needs and lifestyle. Co-living spaces offer shared accommodation and communal facilities such as kitchens and living rooms, while serviced apartments are fully furnished and equipped for short or long-term stays.

Build-to-rent (BTR) is an emerging asset class in Australia that has already matured in Europe and the Americas. A single institutional owner provides purpose-built large schemes which are designed for rent rather than sale. BTR will provide longer, more secure leases and higher levels of amenity. In Australia, planning and tax provisions are playing catch up to enable growth in a sector that will play a significant role in house supply and affordability.

Smart Homes

Smart homes are another area of high growth in Australia – and more people are starting to see the benefits. Smart home technology has and will continue to become more affordable and widely available, making it accessible to a wider range of people. In 2021, there was an average of 20.5 internet-connected devices per household in Australia. This number was forecast to reach 33.8 by 2025, with the strongest growing segments being Smart Security, Smart Outlets and Smart Garden Devices. Other smart home categories include Comfort & Lighting, Control & Connectivity and Home Entertainment. There are an estimated 4.03 million active smart homes in Australia in 2022, which is forecast to reach 7.81 million homes in 2026. This represents an increase of 94%.

This category of technology will allow people to control and monitor their homes remotely, using devices such as smartphones and tablets. This will make it easier to manage energy usage and save money on bills, as well as providing added convenience and security. The development of artificial intelligence and machine learning will enable smart homes to become even more advanced, allowing them to anticipate and respond to the needs of their occupants in real time. Newly built homes will be more thoughtfully designed to incorporate all the smart tools and gadgets made for the home, while existing homes are also being upgraded with smart home devices.







PropTech

PropTech, or property technology, is a rapidly growing industry in Australia. The umbrella of PropTech is massive, as the technology involves the use of digital tools and platforms to improve the process of buying, selling and managing real estate. PropTech companies utilise a range of technologies, including automation, artificial intelligence, data analytics and IoT, to create innovative solutions for the property industry.

PropTech companies can be both consumer-facing or B2B, throughout the entire lifecycle from real estate design, search, valuation, exchange and transaction to management and other services. Consumer-facing PropTech include online marketplaces for buying and selling property, apps for managing rental properties, virtual reality tools for property viewings, property investment tools and other alternative financing. B2B PropTech examples include valuation tools, site assessment tools, virtual pre-construction, property management and more.

An assortment of Australian PropTech companies have been highlighted below, showcasing the breadth in their offerings.

Company	Type	Description
 Archistar	B2B	<u>Archistar</u> is a platform that consolidates information for property developers, architects, home builders, the government and planners. Their features include helping to find development sites, design buildings and simulate land development.
REALTAIR	B2B	<u>Realtair</u> helps real estate agents with listings by combining multiple tools into once dashboard.
	B2B	<u>Propti</u> is a property reporting tool, getting strata reports, building and pest reports, valuations, depreciation reports, QS reports and more.
	B2B	<u>PT Blink</u> is a platform and marketplace that enables flexible design, offsite manufacture and on-site integrating of multi-storey buildings.
EQUIEM	B2B	<u>Equiem</u> is a tenant experience platform that is used to strengthen the relationship between building, workers and workplace experience. This includes building operations, community management, amenity access control and more.
	B2C	<u>Dashdot</u> helps people grow their property portfolio and invest in the right property. They streamline the investment buying process using proprietary technology so that customers can be hands off.
	B2C	<u>Liz</u> is a method to simplify rent payments between tenants and agents through a single payment platform with access to flexible payment options, including scheduled payments.

Key Takeaways: Residential

Technology makes it possible for homes to be more efficient, cost-effective and ESG-friendly

Real estate players are likely to partner with or acquire PropTech players that are complementary to their existing product/service. An example is the use of BIM software to speed up the planning phase of construction, or modular buildings that allow for faster build times.

Smart homes are on the rise, as smart devices improve energy efficiency, security and other convenience-related factors.

People are seeking more flexible and economical ways of living

Instead of treating housing as a product, it can be offered as a service for people to live more flexibly. These business models include service apartments and co-living, which offer numerous add-on services such as breakfast service and room cleaning.

Other benefits of these types of offerings are the ability to provide a community and enable remote working, without the high upfront costs of moving and purchasing furniture.

117 Harrington St., Sydney



About Sumner Capital

Our insights can help you take advantage of the changes in real estate. Talk to us if you're looking to address your challenges.

Kirby Parsonage
Principal - Head of Property
+61 405 562 401
kp@sumnercapital.com.au

Sumner Capital
Suite 303, 25 Lime St
Sydney NSW 2000, Australia
1800 979 790
sumnercapital.com.au
info@sumnercapital.com.au

Sumner Capital was established in 2008 to provide a highly personalised investment and advisory service for high net worth individuals, family offices and institutional investors who require a focused manager and tailored solutions. We currently manage in excess of AUD280m of Australian real estate assets on behalf of local and offshore investors.

In 2022, Sumner Capital formalised its partnership with Avalon Park Group having worked together on a number of transactions from 2013 onwards. Licensed by the Australian Securities and Investment Commission (AFSL No. 466735) we apply the highest standards, attention to detail and skills to the management of each asset.

Sumner Capital Insights

Editorial Team

Li Yen Lim

Business Analyst at nØughtlabs

Li Yen is a Business Analyst with an interest in the real estate and technology sectors. She was previously in the marketing industry, working with social media in the tourism and retail space.

Ong Kar Jin

Chief Strategy Officer at nØughtlabs

Kar Jin (or KJ for short) is a researcher, writer and strategist. He was previously a public affairs analyst before plunging deep into the tech industry, working on blockchain, fintech and tech ethics as a strategy lead. He graduated from Yale University with a BA in History (Honours), focusing on genocide and ethnic conflict in Southeast Asia.

Contributors

Special thanks to:



Jenny Liu

Head of Change Management – CBRE Australia

Jenny is a highly experienced change and engagement specialist with an eye for detail and design, coupled with a strong understanding of the impact spatial design has on human behaviour and engagement. She helps clients transition to open, flexible environments and agile working – giving her a unique perspective on how to approach workplace needs and opportunities.

Stevie Collins

Associate Director – Office Leasing Sydney CBD - CBRE Australia

Stevie's significant experience in complex end-to-end transaction management allows for a deeper insight into her client's real estate drivers, working alongside every stakeholder to deliver a commercial solution that complements their business.

Thomas Biglands

Research Manager - CBRE Australia

Thomas leads Office Research across NSW and ACT by generating in-depth commercial real estate insights for CBRE clients across all business lines. He has a strong understanding of all aspects of the commercial real estate sector and takes pride in being able to blend that market experience with an in-depth knowledge of advanced analytics.

Scott Willson

CEO, Forbury

Scott has a mathematical mind. Curious and creative, he applies logic to unlock performance. Scott has grown Forbury from the ground up and thrives on building culture, loyalty and results. Challenging the status quo and building authentic customer value are important to Scott, and he is proud of Forbury's status as the number one business of its kind in Australasia.

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