

Office Agency

March 2016



Here to guide you

The Revolution Is Upon Us –
The Exponential Changes in Commercial Property



Be under no doubt, we are in the midst of a global revolution, driven by demographic, technological and economic factors that will see global cities take on a new context, the jobs market turned on its head, and the manner in which office space is constructed, leased, managed and occupied by end users changed forever.

There will be more change in commercial property in the next 5 years than we have seen in the last 30 years.

The revolution is upon us.

In this paper, we review the factors fuelling this revolution, identify current trends, and forecast what lies ahead for commercial property in Australia.

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The Driving Forces

The macro picture involves many moving parts driving change, but three core factors stand out:

one
 Demographic

two
 Technological

three
 Economic



Demographic Shifts

It is estimated that by 2025, 75% of the global workforce will be from the Millennial generation, or Gen Y^[1]. It's a sweeping generalisation, and one which is often debated, but it is broadly considered that today's younger people work and live differently from the generations which preceded them (don't oldies always say that!).

There is an expectation from Millennials that they will be afforded the flexibility to work where they want, when they want, and how they want. Rightly so, because this is how they have been educated. And they are happy to forego the safety of working for a large established company, in favour of a riskier start-up. Perhaps they are comfortable in falling back on Mum and Dad if it fails to work out!

“” Only 7% of Gen-Ys work for a Fortune 500 company because start-ups are dominating the workforce for this demographic in today's economy. If large corporations want to remain competitive, they need to aggressively recruit Gen-Y workers. Gen-Y will form 75% of the workforce by 2025 and are actively shaping corporate culture and expectations. Big corporations can't afford to be left behind. [2]

Dan Schawbel, founder of Millennial Branding
March 2016

From a lifestyle perspective, gone are the aspirations of moving to the suburbs and owning a large house with a pool and two cars. A compact city centre apartment is what is demanded, with the ability to walk to work, exercise, and have multiple leisure options within a short distance of home. Indeed, across Australia we are witnessing an explosion of residential development within our cities, located close to core CBD's, and providing exceptional on-site amenity.

Coming next is Gen Z, those born from the late 1990s, who will be entering the workforce within the next 10 years, bringing yet another dynamic.



Technological Advances

The exponential rate of technological change is well reported, with Moore's Law^[3] largely holding true since the 1970s. In short, the power of technology is increasing, and the cost decreasing, at an amazing pace.

A basic US\$99 128GB chip offers a 30 million times capacity increase on 1956 chips, and a 1,000 times capacity increase on 2005. Further, it is estimated that an entry level US\$1,000 laptop will have the processing power of a human brain by 2023, and by 2050 the equivalent will offer the power of all of the human brains in the world combined^[4].

Technology is also fully mobile. One billion people have handheld devices today^[5], and by 2025 five billion people will be connected by handheld devices^[6].

Massive, cheap, and widely available processing power has led to the development of a plethora of software platforms (including Apps). Consequently, this has created the phenomenon commonly known as 'digital disruption'.

2023



Economic Factors

1991 to 2015 has seen 24 years of continued growth in Australia. But, now slower GDP growth has left the government struggling to fund services, and grappling with tax reform.

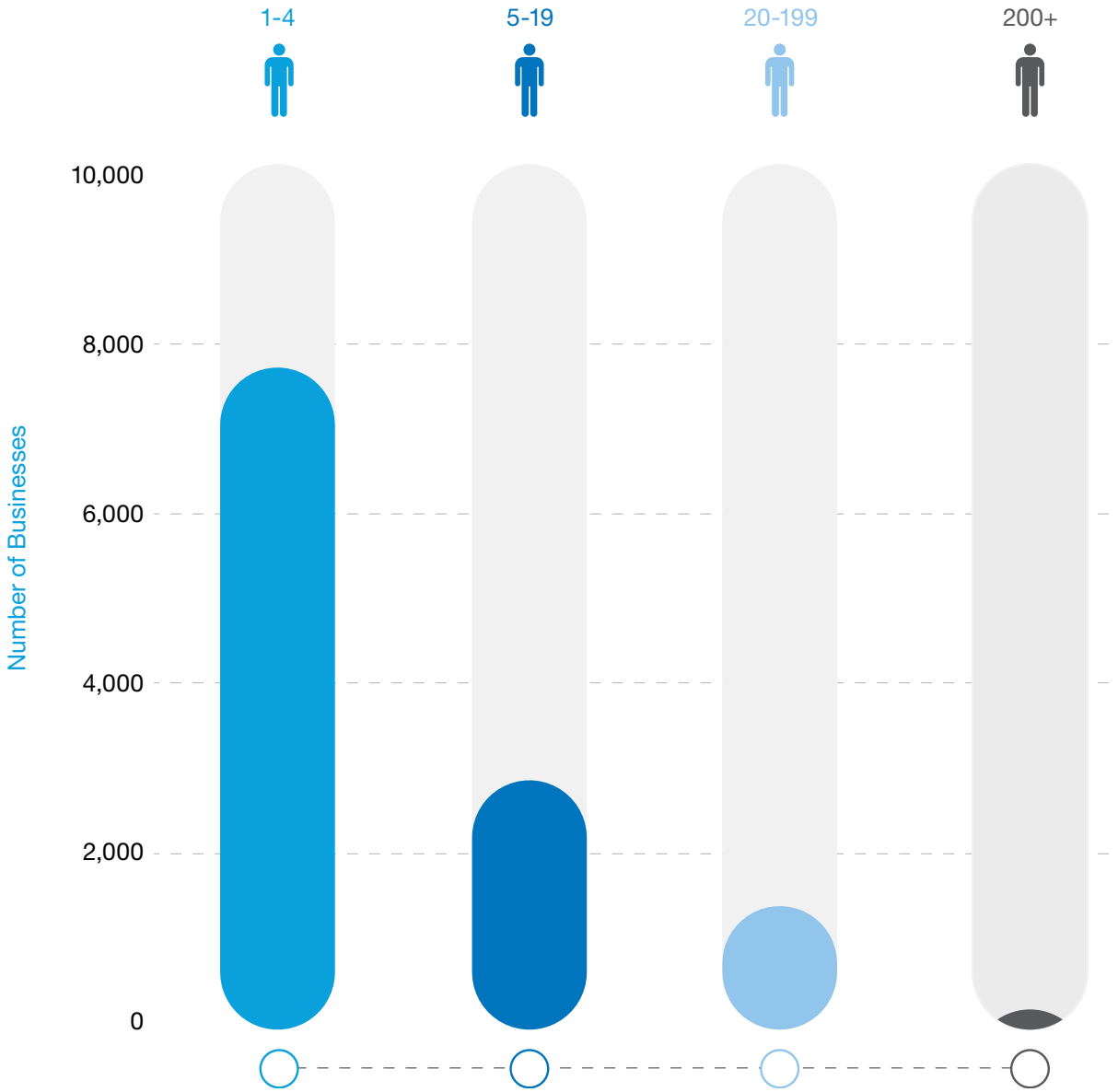
Australia has all but exhausted the efficiencies to be gained from traditional mass production and scale^[7], and over the next 20 years 44% of our jobs are at risk from digital disruption, affecting some 5.1 million workers. However, over the same period a \$57.4 billion increase in GDP could be achieved if we shift just 1% of our workforce into STEM (Science, Technology, Engineering & Mathematics)^[8].

This is why Prime Minister Turnbull is pushing for Australia to become a start-up and innovation nation.

Indeed, in pockets, the establishment of small businesses is currently very much supported. Sydney is seeking to define itself as the central hub for new business creation, and according to Sydney Councillor, Angela Vithoulkas, 64% of Australia's tech start-ups are located in the City of Sydney area.

The City of Sydney has also issued its draft tech start-up action plan, and is promoting start-up business through initiatives such as SydStart and Sydney Start-up Week. Stone & Chalk, the Fintech incubator, was oversubscribed and has had to take on additional floor space twice since inception, and the Tyro Payments incubator space at 155 Clarence Street is also a success.

Financial backing is available for the start-ups, with private equity investors and crowd funding creating available finance for business ventures which would historically have been viewed as risky by banking institutions, and as such, suppressed.



Consistent with the swing away from being employed by big business, 30% of the Australian workforce are now freelancers^[9], and in the US forecasts are that 40% of the massive workforce will be freelance by 2020. That's a huge shift which changes the demand base for commercial buildings and the manner in which they are occupied significantly.

Finally, perhaps the Millennials have the right idea, as 40% of today's Fortune 500 companies are forecast to disappear within the next 10 years^[10].

30% of the Australian workforce are now freelancers^[10]

Knight Frank

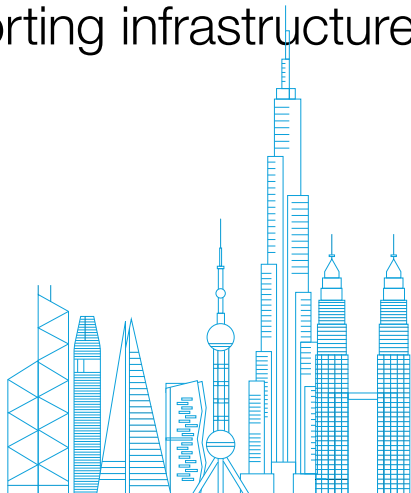
Global Impacts

With the driving forces explained, what are the impacts being felt at a global level?



The rise of global cities

The UN is forecasting the world's cities to increase in population by 380 million people in the next five years. Consequently, the planet will have to build the equivalent of 15 cities of the scale of Sydney every year between now and 2020, together with all of the supporting infrastructure.^[1]



Fuelling the rise of global cities are three key factors^[12]:

- The growing centrality of knowledge workers;
- The transformation of former industrial and fringe areas into new districts, bringing offices, leisure and homes closer together;
- Investors seeking higher returns on their money, offering a pool of funds to back future urban development.

We need only think of Docklands in Melbourne, or Barangaroo in Sydney as current examples of this.

It is little surprise that cities are expanding. The workers of global cities are among the most productive in the world, typically outperforming their host countries. Asia's cities have powered ahead, and companies want to capitalise on this success, resulting in a new wave of development.

And this is only the beginning. The global cities are set for further expansion, thanks to the digital revolution that is unfolding around us^[12].



The automation of 100 million jobs

With technological advances, particularly in Artificial Intelligence (AI), there are fears that smart robots may replace 100 million workers – or about one third of the world's jobs – by 2025^[13].

The roles at risk are not limited to manual jobs which can be replaced by production lines, but include clerical and administrative workers, technology and sales professionals, and a range of other roles currently considered to require knowledge, judgement and decision making. However, the accelerated pace of AI development funded, according to Quid, by an increase in private investment from US\$1.7 billion in 2009 to US\$14.9 billion in 2014, will inevitably create a new class of intelligent automation capable of performing tasks which in the past were thought possible only for humans^[13].



The declining workforce

According to KPMG's demographic studies, the working-age population in the United States spiked in the 1960s and 1970s, following the Baby Boom, and then again in the mid-1990s through the mid-2000s, following the Echo Boom. However, the labour pool has been declining dramatically since 2010 due to lower birth rates that began in the 1980s. This decline is expected to continue for the next 10 years^[13].

In Australia, a similar trend is apparent, albeit offset by the doubling of immigration over the past 10 years.



The skills shortage

There is a perceived discrepancy between the skills possessed by the graduates being produced by our educational facilities, and those required for success in the business environment.

In the US, employers believe that college graduates are not developing the skills needed for the 21st century workplace. And nearly 8 in 10 adults (78%) agree "If the US fails to develop a more talented workforce, it will fall behind other countries" according to a Gallup-Lumina foundation poll^[14].

So what skills are really needed for tomorrow's world? In the lead up to PWC's 'Creating Australia's Future Innovators' events, they asked keynote speaker, Harvard Innovation Lab's Tony Wagner, for his view on some of the most important skills for the 21st Century^[8]:

One Critical Thinking

All students are going to need to learn how to think critically. Students need to know how to ask really good questions. In today's world being able to ask really good questions is much more important than memorising easy answers.

Two Collaboration

What is really important is the ability to collaborate. Increasingly all work is done collaboratively.

Three Communication

Both oral and written communication skills are important, but just as important is the ability to listen.

Four Creative Problem Solving

There are two types of innovations. There are the innovations that bring new kinds of possibilities to life – and that's a matter of a particular time and talent converging – like a Steve Jobs. Then there are the innovations that are the result of creative problem solving.

Creative problem solving is increasingly the coin of realm. It's the skill in highest demand.



Digital disruption

Digital disruption is the change that occurs when new digital technologies and business models affect the value proposition of existing goods and services.

There are a multitude of examples of digital disruption which have occurred in recent years:

- Radio took 38 years to reach 50 million users; Facebook reached 200 million users in less than a year;
- Uber is a US\$62 billion transport company that didn't exist 5 years ago, and which owns no vehicles. In early 2016, it was reported that San Francisco's largest taxi operator, Yellow Taxi, was filing for bankruptcy, with many citing ride sharing platforms such as Uber and Lyft as the main reasons for its failure;
- 5 years ago, no one had an iPad, now 300 million of us do, and how we access media, shop and work has changed forever;
- Airbnb is challenging the hotel industry (yet owns no real estate), Netflix competes with TV channel content, Freelancer provides a flexible and skilled workforce, and LiquidSpace provides short term commercial office accommodation.

In fact, there are very few areas of business, or indeed life, where digital disruption is not having an impact.

“” The Airbnb of real estate is here already, and gathering momentum swiftly.

Pulling It Apart – Making Sense of the Data

Here's what we can distil from the drivers of change and current trends which will help us to predict the future impacts for commercial property:

Demographic	Technological	Economic
<ul style="list-style-type: none">▪ The best and brightest young people have different lifestyle and work aspirations;▪ Growing centrality of knowledge workers;▪ Smaller pool of the best talent;▪ Not excited by big business, want to work with creative start-ups;▪ Need to develop the following skills to succeed:<ul style="list-style-type: none">– Critical thinking– Collaboration– Communication– Creative problem solving	<ul style="list-style-type: none">▪ Exponential growth in processing power, and ever decreasing cost<ul style="list-style-type: none">– The power of the human brain in your pocket by 2023;▪ Facilitates flexibility like never before;▪ Digital disruption is impacting every aspect of work, life and leisure.	<ul style="list-style-type: none">▪ 44% of Australian jobs at risk from digital disruption – 5.1 million;▪ Investing in start-ups and innovation is key. \$57.4 billion of GDP could be created in the next 20 years by investing in STEM;▪ Local and Federal Government push towards start-ups and innovation businesses;▪ 40% of Fortune 500 companies forecast to disappear within the next 10 years

We are living in an era of a declining workforce, coupled with a significant shift towards intelligent automation, and revolutionary digital disruption.

Consequently, highly skilled and educated workers are in demand, with companies scrambling to secure the knowledge workers who can place them 'ahead of the curve'.

The resounding message from around the world is that such workers want the lifestyle that is afforded by the global cities. These workers also need continued learning and development to reach their peak, so further education is key.

This demand is turning major cities into talent magnets, and consequently multi-national corporations feel it is necessary to locate in the heart of our global cities to compete for the best and brightest personnel, and take advantage of the benefits that the creation of industry clusters can offer, such as the technology based SOMA district of San Francisco and Shoreditch in London

The power, in essence, has shifted from employer, to employee – The companies will go where the talent is located.

This demand also explains, in part, why major centres in Australia, such as Sydney and Melbourne, have seen substantial growth in technology and education occupiers in recent years, coupled with a migration of occupiers towards the CBDs rather than away from them.

Putting It Back Together This Means For Communities

Here's our prediction for 10 key factors which will have a significant impact on commercial real estate in Australia in the next 5 to 10 years, in no particular order of precedence.

Co-Working

Co-Working spaces will continue to expand at a blistering rate.

Co-Working spaces offer short term, flexible and creative premises for people to be able to work independently, collaboratively, or in small teams – the perfect spaces in which start-up companies and other small businesses can operate alongside like-minded people within a community environment.

There are already more Co-Working Spaces per capita in Australia than anywhere else in the world^[15], and WeWork, the global leader, has yet to open its doors here, albeit their arrival is imminent, having committed to a facility in Sydney of approx. 8,000 sqm.

The Co-Working trend is discussed separately in the Knight Frank paper "The Consumerisation of the Workplace", dated September 2015.

Small Suites

The explosion of start-up businesses will invariably increase demand for good quality fitted out office suites, as the start-ups outgrow Co-Working spaces and seek their own identity

This increased demand for small suites has been present for the past 12 to 18 months, particularly in Sydney and Melbourne, and will continue to grow. This topic is discussed in the Knight Frank paper "The Sydney Success Story", dated October 2015.

Workspace

"We've become more educated, more connected, more vocal. The workplace of the future will be all about me"^[7].

Workspaces will increasingly become an essential tool in the attraction and retention of the best talent, and companies will simply have to provide the best workspaces in the best location, with the best facilities, and the best amenity, to have any chance of competing. It is no accident that Google provides a vibrant workspace, along with free food & drink, and leisure activities, within its office space.

These workspaces need to foster the core skills required for tomorrow's workforce to succeed – Critical thinking; Collaboration; Communication, and; Creative problem solving. This will take a creative interior design approach which considers the psychology of the workspace.

Finally, we know that well designed workspaces have a positive impact on productivity^[16], so if the workspace is right, companies will attract and retain the best talent, foster the skills required, and get more productivity from their workforce.

"Workplaces will be a place where people meet, learn and share, rather than a place of containment"^[7].

Compression of Spatial Norms

Creating vibrant workspaces and allowing employee flexibility will support the continued implementation of agile working.

This will allow space to be used more effectively by larger companies, leading to reduced spatial demand for the overall employee headcount and reducing reactive requirements for expansion space, as well as reactive sub-leasing (see "Sweating Space" below).

This is discussed in the Knight Frank paper "Don't Get Left Behind", dated July 2015.

Buildings

Coupled with the best workspaces, employees demand exceptional amenity in and around the buildings in which they work.

Companies will therefore seek space in well located buildings with amenity provided either within the building or in very close proximity. Core CBD locations are clearly favourable in this regard.

Many building owners have already recognised this, providing lobby cafés, end of trip facilities, shared meeting spaces, car sharing, community events, parcel pick-up, concierge services, and other benefits to their tenants. But, much more will be demanded in future.

ther – What Does Commercial Property?

Mixed Use Developments

Mixed use developments which regenerate previously run down areas of cities will be favoured, where employees can genuinely live, work and play in a single zone. Developments such as Hudson Yards in New York, Battersea Power Station in London, Barangaroo and The Bays Precinct in Sydney will be in demand.

Lease Flexibility

Companies will demand ever increasing lease flexibility and shorter lease terms as they struggle to predict the future growth (or rather “fluidity”) of their business.

Competition from platforms such as LiquidSpace (see “Direct Procurement of Space” below) will put pressure on building owners to facilitate this flexibility, potentially creating valuation challenges as the Weighted Average Lease Expiry (WALE) of assets becomes ever shorter. This could lead to a re-defining of the core valuation principles relating to office buildings.

‘Sweating’ Space

Sophisticated asset optimisation technology solutions will allow corporates to accurately monitor the use of space and intensify the use of leased premises. Underutilised areas could be offered to third parties through platforms such as LiquidSpace on short term agreements to minimise corporate waste.

Direct Procurement of Space

Increasingly sophisticated technology platforms will take the place of leasing brokers for smaller premises requirements by connecting the owner and occupier directly.

A major technology company will inevitably create the ‘Uber of commercial real estate’, fracturing the need to work through a traditional broker. Platforms such as LiquidSpace are already pressing into this market.

LiquidSpace covers 600 cities in the US, Canada, and Australia, and bills itself as: “the network for office space where start-ups and growing teams connect directly with real estate owners, operators and companies that have space to share. The LiquidSpace network transforms the entire commercial real estate process. Our online tools simplify the

discovery and transaction of office space, and our reimagined legal framework eliminates the cost and complexities of traditional leasing. Office space is now yours with a click. Pay by the month. “No lease, no hassle”.

Forecasts are that by 2020, 50% of commercial real estate transactions will be completed online^[5].

Of course, exceptionally talented brokers, such as those at Knight Frank, will always have a pivotal role to play!

Real Estate Agents will ‘turn tech’

Corporate Real Estate Technology, or CRE Tech, is big business, and growing. Digital disruption is alive and kicking in the real estate industry, and traditional real estate companies will have to invest smartly.

75 CRE Tech Companies have been created in the last five years, with investment of over \$5 billion^[5]. Yes, Knight Frank is one of those investors!

This will impact all parts of the CRE property cycle, including visualisation, analytics, lease administration, operation management, online rental, and asset optimisation.

There will be further swift and significant change in the commercial property industry, the impacts of which are difficult, if not impossible, to assess today. What we do know, however, is that we live in exponential times, where embracing and actively encouraging the challenging of established norms is the only way to prosper.

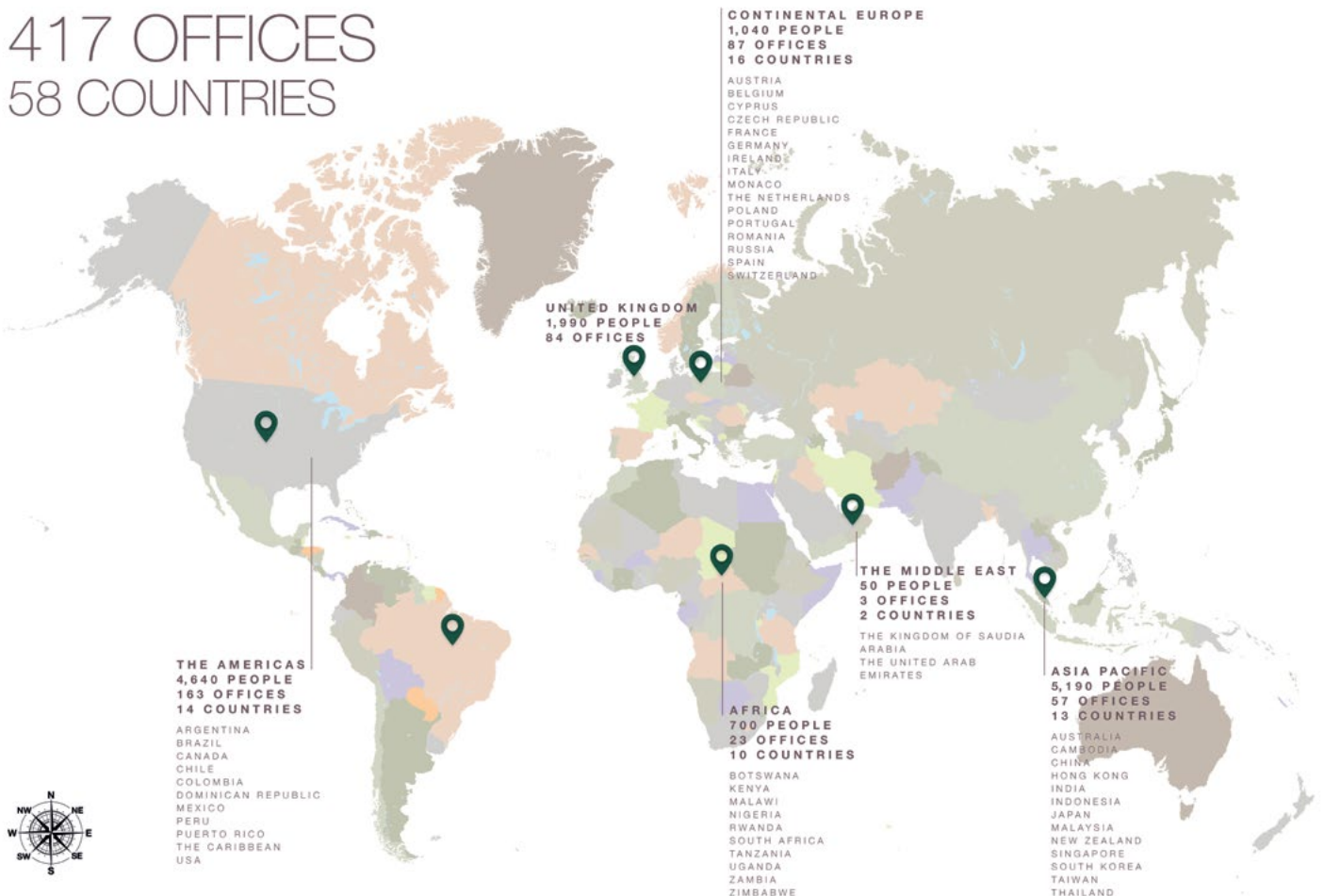
About Knight Frank

Our Global Business

Knight Frank LLP is the leading independent global property consultancy. Headquartered in London, Knight Frank and its New York-based global partner, Newmark Grubb Knight Frank, operate from 417 offices, in 58 countries, across six continents.

More than 12,000 professionals handle in excess of US\$886 billion worth of commercial, agricultural and residential real estate annually, advising clients ranging from individual owners and buyers to major developers, investors and corporate tenants.

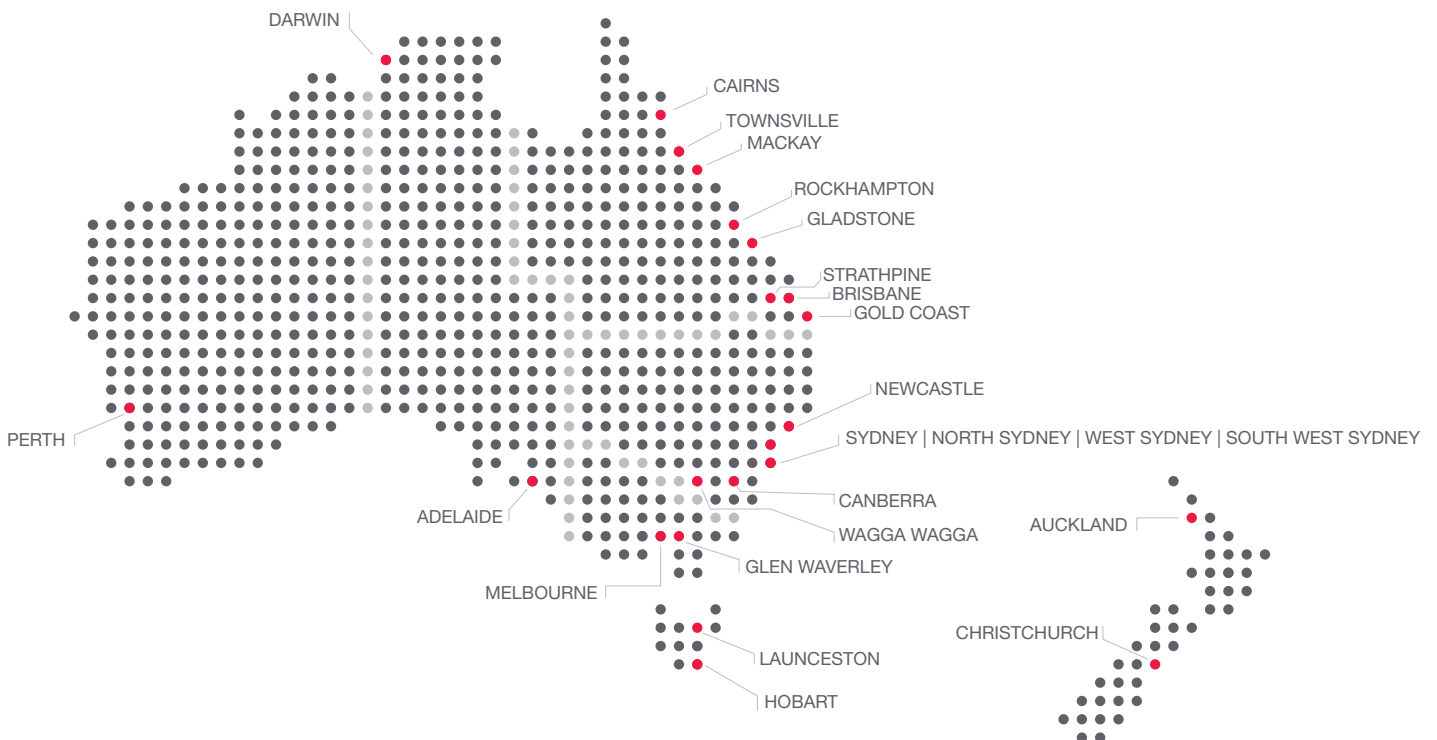
417 OFFICES
58 COUNTRIES



In Australia

Within Australia and New Zealand we have a network of 26 offices and over 1,000 professionals across our business. We provide a full range of services which include:

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- Capital Markets
- Commercial Sales
- Facilities Management
- Global Corporate Services
- Health and Aged Care
- Industrial Sales and Leasing
- Land Marketing
- Office Leasing
- Project Management
- Property Accounting Services
- Property Management
- Pubs and Hotels
- Research and Consultancy
- Residential and Project Marketing
- Retail Sales, Leasing and Management
- Sustainability
- Town Planning
- Valuations



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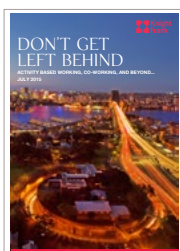
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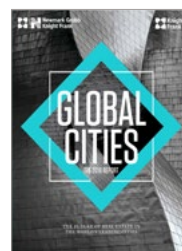
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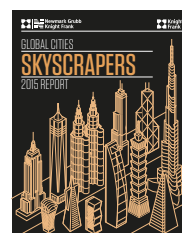
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