



The traditional office space is undergoing its most dramatic shift since the creation of the cubicle.



ANZ Centre 833 Collins

6 Star Green Star – Office Design v2 6 Star Green Star – Office As Built v2 6 Star Green Star – Office Interiors v1.1

Photography by Earl Carter

See case study on page 60

riven by advances in communication technologies, demands for more flexible working arrangements, a dawning environmental awareness and an increased emphasis on cost reduction and productivity, we're witnessing a remarkable change in the way people work – and where they work.

While concepts of office-based work extend back as far as ancient Egypt, for much of human history it wasn't limited to a physical location. In the elaborate Roman bureaucracy, for instance, the office was a mobile 'bureau' of scribes and administrators who would work wherever it suited them. Later, offices from the Uffizi Palace in Florence to the Bank of England were created as administrative adjuncts to the centralised power of the state.

It took the telegraph and telephone to transform offices from places of work to places of power – with decision-making happening in the office, rather than on the factory floor. With the dawning of the Industrial Revolution in the mid-18th century, bankers, insurers, mercantilists and merchants needed large numbers of clerks and specialised office space was required.

Other innovations revolutionised the very shape of the office. The first Otis

passenger lift, installed at 488 Broadway in New York City in 1857, sent buildings skyward. The Home Insurance Building in Chicago, built in 1884, was the first to use structural steel in its frame. And the first modern air conditioner, invented by Carrier in 1902, led to buildings with large floor plates. By 1906, Sears, Roebuck and Co opened its mail order and headquarters operation in a 280,000 square metre building in Chicago, at the time, the largest building in the world.

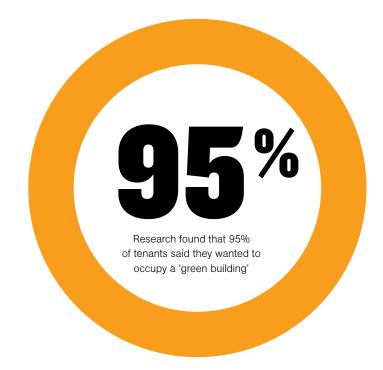
American engineer Frederick Taylor is credited as one of the first to design an efficient, purpose-built office space. In the early twentieth century, Taylor's designs crowded workers together in factory-style open environments while bosses monitored their work from private offices.

By the 1960s, socialist values encouraged more egalitarian office spaces, with arrangements dependent on functions - side-by-side workstations for clerks, or pinwheel desk patterns for designers.

In 1968, Herman Miller was inspired to create a product based on this new workplace philosophy, known as 'The Action Office'. Enter the office cubicle – the first modular furniture system, with low dividers and flexible work surfaces. By the 1980s, as the ranks of middle







managers swelled, the cubicle concept was taken to the extreme, with high modular walls dividing desks, restricting natural light and blunting collaboration.

The last decade or so has seen a significant reduction in the average office space per employee. In 1995, it was around 30 square metres; today it is 20 square metres or less. This shrinking workspace can be attributed, in part, to companies leveraging hot desking or activity-based working, as well as teleworking.

Today, designers are attempting to part the sea of cubicles and style more sociable spaces, recognising that workspaces must reflect the range of tasks the office worker conducts during a day. At the same time, Green Star is driving an increased focus on good indoor environment quality, and pushing designers to create more sustainable, suitable, resource-conscious working environments which place people 'front and centre'.

The Green Star - Office Interiors v1.1 rating tool, which was released in May 2006, has encouraged higher levels of environmental sustainability in office fitouts by providing best practice benchmarks for everything from natural light and fresh air, to waste management and low-emissions materials. More than 100 offices around Australia have achieved Green Star certification under the rating tool, with another 100 plus projects registered for certification. In late 2012, the Green Building Council of Australia released the next generation Green Star - Interiors tool, which takes sustainability beyond the office and enables other building types to reap the benefits of green interiors.

Sustainable spaces

At the intersection of sustainability, technology and cost-saving sits the office of the future – one which promotes flexibility, adaptability and mobility. Increasingly, we are seeing high-performance green buildings designed around activity-based working or 'free range' principles. Large organisations, particularly the big financial institutions, are recognising that they no longer need to accommodate their entire workforce in a structured, cubicle-filled workplace, and so small, stuffy offices are making way for hot desks and collaborative hubs flooded with natural light and with views of the outdoors.

When calculating the amount of space needed for the entire workforce, it is well documented that up to 40 per cent of the assigned desks in a traditional-style office space are empty at any given time, with people absent, at meetings or elsewhere in the building.

"Clearly organisations are keen on controlling costs, but in parallel, most are driving a higher strategic agenda such as fostering creativity, improving customer service, people performance or speed to market," says Natalie Slessor, Head of Workplace, within Lend Lease's Business Solutions Team

"The new agile or activity-based workplaces allow people to concentrate, create and collaborate in spaces designed to truly support those tasks. So today, it's not about personalising a desk, or rather expecting just one desk or meeting room type to support a wide variety of tasks throughout the day, it's about personalising

your day – selecting the right places to do your best work," Natalie adds.

To be successful, this model requires a diverse hierarchy of spaces, with plenty of options, including quiet space for focused work, meetings, café-style working and relaxation spaces. It also requires a commitment by organisations to ensure that the shift is an empowering one for staff, by looking for ways other than the personal desk to provide a sense of security, identity and engagement.

"These new diverse and choice-filled spaces and places are healthy and sustainable by their very nature. People move more as they work in different ergonomic settings regularly, but these spaces use less square meterage per person as a general rule, less energy as every desk is cleared and unplugged everyday, less paper and there is more staff empowerment. This, in turn, delivers sustainable outcomes that reach beyond the workplace and back into people's homes and communities," Natalie concludes.

Attracting and retaining the top talent

A sustainable workplace is increasingly becoming a powerful recruitment and retention tool. The *Colliers International 2012 Office Tenant Survey* found that sustainable design, activity-based working and the attraction and retention of staff are the top priorities for most businesses. The report found that a whopping 95 per cent of tenants said they wanted to occupy a 'green' building, up from 75 per cent in 2010.

"Building choice is incredibly important to staff in this day and age – they not only want to be well located, with good access to The complete refit of GPT's office space has pushed the envelope of sustainable fitouts by delivering an energy, water and resource efficient workspace within a building that is more than 30 years old.

public transport and facilities such as child care, bike racks and change rooms, but they also want to work in a flexible, modern environment that is sustainably designed," says Simon Hunt, Colliers International Managing Director of Office Leasing.

"Where sustainable building design used to be an issue for those at the top of a business, it is now being driven from the bottom up. Workers don't feel the need to familiarise themselves with every detail of things like legislation and ratings systems, but they do want to be able to say they work in a 'green building'.

"Green is now the norm – where it used to be a bonus in a building, it is now expected," Simon adds.

ANZ's headquarters in Melbourne's Docklands is an impressive example of a 'world leadership' sustainable building on a massive scale. Designed by HASSELL in collaboration with Lend Lease Developments, the 83,000 square metre office achieved 6 Star Green Star – Office Interiors v1.1 certification in July 2012, making it the largest single-tenanted 6 Star Green Star-rated office fitout in the country, and only the second building in Australia to have achieved the 6 Star Green Star certification 'trifecta' of Design, As Built and Interiors ratings.

The design of ANZ's office emphasises and facilitates teamwork, offering a range of interconnected spaces to support individual and group working styles. ANZ General Manager Property, Kate Langan, says that "staff resoundingly told us that their physical work environment is important for their individual productivity and the recognition we have received from the GBCA through our

Green Star ratings clearly shows that the ANZ Centre has gone a long way to meeting our staff's expectations of their work environment."

The new GPT headquarters in Sydney's iconic, Harry Siedler-designed MLC Centre, achieved 6 Star Green Star – Office Interiors v1.1 certification in July 2012. The complete refit of GPT's office space has pushed the envelope of sustainable fitouts by delivering an energy, water and resource efficient workspace within a building that is more than 30 years old.

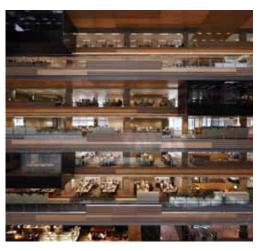
Acknowledging that its workforce was more mobile than ever before, GPT created an office environment in which staff no longer have individual work spaces, but instead shift between a mix of open plan work areas, group meeting spaces and soundproof 'pods', all connected to a wireless network. As a result, the number of desks has decreased from 328 to 272 and GPT still has a 20 per cent daily vacancy rate – an indication of the highly mobile workforce.

"GPT already has fewer desks than people," says GPT's Head of Change & Sustainability, Rosemary Kirkby. "People are free to choose where they will work on a daily basis, including at places outside the MLC Centre. The cost of churn has been eliminated. This workplace acknowledges that we are all different and provides choices to satisfy individual preferences."

The new GPT office has reduced paper storage by 90 per cent, paper use by 75 per cent, with expected energy costs to halve and lighting energy consumption to fall by 70 per cent. The company is also paying lower rental costs due to the reduction in





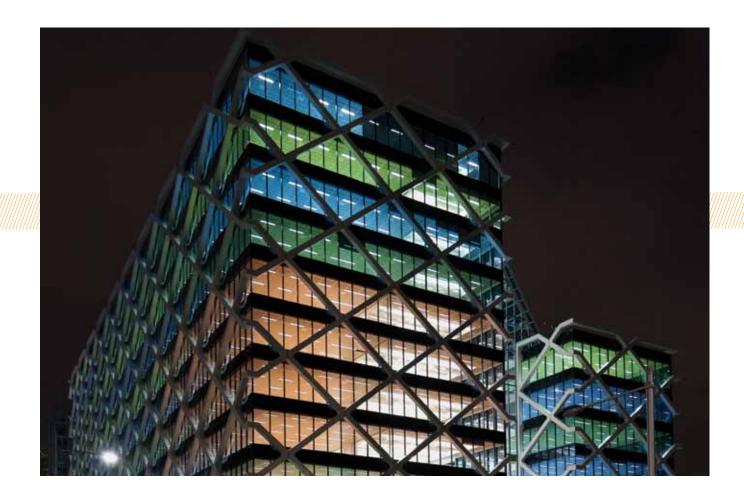


- Left: ANZ Centre 833 Collins
 6 Star Green Star Office Design v2
 6 Star Green Star Office As Built v2
 6 Star Green Star Office Interiors v1.1

Photography by Earl Carter

Right: One Shelly Street

- 6 Star Green Star Office Design v2 6 Star Green Star Office As Built v2



floor space. The GPT office is an indicator of a future in which office buildings are meeting places for people to connect and collaborate, rather than places where people 'go to work'.

Rosemary says that the design of the next generation work environment for GPT's Melbourne staff is underway.

"The design of the Melbourne office is being used as a laboratory to test ideas about the future of work and its associated technologies. It will be analogous with a theatre set, easily reconfigured and supportive of human interaction. In this, it will support an increasing amount of project work. It will be managed actively so that spare space does not stand idle but is available for use by others, including our customers. Our intention is to construct a place which will not need further significant investment over the life of the lease – and that's a good sustainability story!"

Productivity plus

Macquarie Group was one of the first companies to seize the opportunities presented by an activity-based working model and a sustainable workplace, after moving to One Shelley Street in Sydney, which has 6 Star Green Star – Office Design v2 and As Built v2 ratings.

Research by the University of Technology Sydney, which tracked 2,500

Macquarie Bank employees over 15 months as they moved into their new high-performance office, has found that the combination of activity-based working and world-class environmental attributes are escalating productivity to new heights.

"A group of participants in the study showed an average of 15 per cent net increase in perceived productivity," says UTS' Senior Lecturer in the Faculty of Design, Architecture and Building, Leena Thomas.

As real estate represents around seven to eight per cent of general business costs, compared to wages which represent up to eighty per cent, a modest increase in productivity can make a large impact on a company's bottom line.

The old 'carrot and stick' model of incentivising based on speed and competition is detrimental to creativity, and our most inspired solutions emerge when we are relaxed, playful and engaged. Work is becoming less defined by hours seen to be at a desk, and is based more on an agreed successful outcome, with a flexible pathway to get there.

Future visions

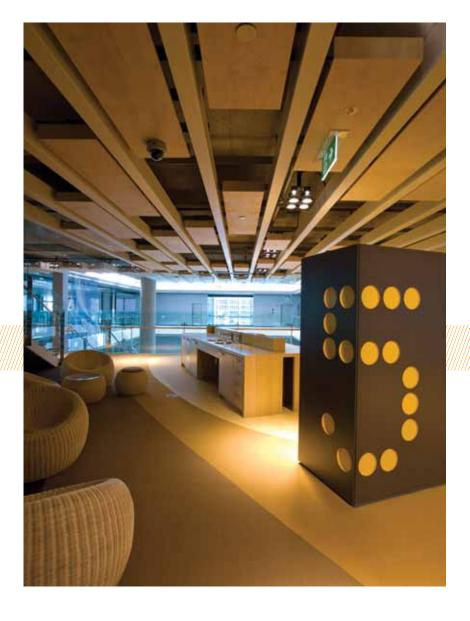
Just as the decanters of booze are no longer on display and the smoke-filled meeting rooms that Don Draper and his colleagues occupied are a thing of the past, the office environment of today will be replaced as society's values continue to evolve.

"Offices will definitely need to change, because the way people use offices to do their work will change," says HASSELL's Head of Knowledge and Sustainability, Steve Coster.

"The idea that the office building is the only space in which to do work is already diminishing, as people are mobile and the office is just one of many destinations. Similarly, while the desk was once the only place we sat to do our work, today we are moving between a range of different types of spaces and activities within the office."

Two credits within the new Green Star – Interiors rating tool address ergonomics and quality of amenities – how the space works as a whole. The 'Quality of Amenities' credit, in particular, recognises the importance of facilitating more than just 'water cooler conversations' by designing spaces that encourage people to interact.

"The office of the future will be less about design trends and more focused on the true needs of the organisation," says ISIS Group's sustainability specialist, Josh Bruce. "Companies will place a greater emphasis on understanding their people, function, stakeholders, clients and commercial objectives to create an office that enriches and empowers staff and stakeholders."



SA Water HQ Tenancy 6 Star Green Star - Office Interiors v1.1

For Josh, flexibility is paramount. The future office will be flexible, adaptable and "respond to changes in staff needs, economic conditions and strategy". This will require "a more rigorous consideration of social, environmental and economic factors in the design, construction and operational phases of an office."

Of course, technology's role in evolving the office cannot be understated. Wireless internet connections, tablets and smart phones, Skype and social media are enabling people to embrace 'anytime, anywhere' working. We can still have a 'face-to-face' conversation but be in different cities – or even different countries. Smart integration of technology into buildings and digital infrastructure into communities will ensure a more seamless transition to 'work' as a practice, rather than a place.

More attention will also be given to the materials we use and, as more evidence comes to light about their detrimental effects, we will avoid introducing harmful volatile organic compounds, particularly formaldehyde, into our indoor environments through our choice of furnishings and finishes.

While the focus of introducing new workplace models has often been around cost savings, there are far richer benefits of the new workplace, and sustainability is just one of them, says Steve Coster.

"The most immediate way to reduce the carbon footprint of your building is to have a smaller one – this makes a much larger impact than a marginal reduction in energy use. Workplaces are generally under-utilised spaces, so designing a space that is used more intensively has an inherent sustainability benefit. In addition, spaces that are flexible and adaptable will become more valuable, as organisations can change team structures and locations more quickly and easily.

"In the future, and in this context of more mobile, dynamic, sustainable ways of working, the office will play an even more critical role than it does today. It will be the physical place where people gain critical exposure to their colleagues, connect with their managers and work through challenges together. This is a fundamentally different emphasis to its previous role as the place where 'work gets done'. Instead, the office's function will be to facilitate coaching, sharing and monitoring – those important parts of work that are best done face-to-face."

Beyond offices

The new Green Star –
Interiors PILOT rating tool, released in late 2012, assesses the interior fitout of any building type – whether that's a hospital, a school, a shop or an office.

Green Star – Interiors contains fewer credits than its predecessor, as well as improved flexibility, reduced documentation requirements and clearer compliance requirements which make this rating tool easier and cheaper to use.

For more information: gbca.org.au/interiors