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# **Furnishing the Offices of Tomorrow: How Office Furniture is Evolving** for the Future.

When you think about cutting-edge innovation and future tech, office furniture is probably the last industry that comes to mind. Sure, we've come a long way from heavy wooden benches carved from tree logs, but has office furniture really evolved that much over the past few decades?

With more than three decades of combined industry experience, OLG has witnessed countless trends come and go. We've made it our business to stay on top of the latest in office furniture innovation, regularly attending international conventions and expos and developing many new products from the ground up.

In this article, we'll explore all the changes we've seen in the office to date and peek into some soon-to-be-released technology that promises to make our lives the office much more productive. We'll also make some predictions about what the office of tomorrow could look like and what that means for future employees.

# The History of the Office

To most people, the idea of the "office" feels like a strictly modern phenomenon. It seems hard to imagine an office prior to the invention of computers, post-it notes and Steve Carrell.



Interestingly, we can trace the origins of today's office back almost 300 years to the Old Admiralty Office in London.

Completed in 1726, this grand building has played home to naval administrators, government officials and British celebrities including Winston Churchill and Ian Fleming.

Despite being called an office, the actual working conditions in the Admiralty Office were less than ideal. From rows of rigid wooden desks with cast-iron frames to chairs that were determined to ruin your posture, the early iterations of the office were far from comfortable.

And then, for a long time, nothing really changed.





Computers, fax machines and Taco Tuesdays were still centuries away and the trend of endless rows of hard wooden desks would continue right through the 20th century.

one legendary inventor.

In fact, it wasn't until the 1960's that the modern office got a revamp, and it's all thanks to

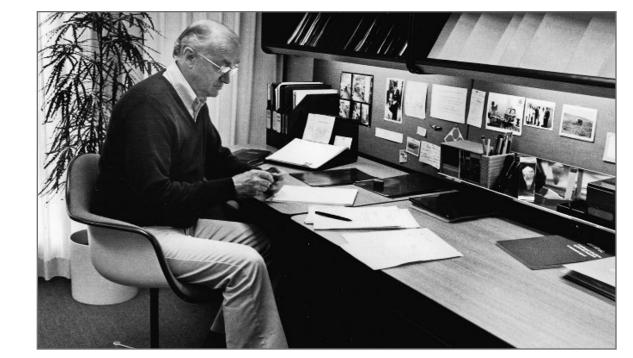




#### Robert Propst – The Father of the Open Plan Office

Robert Propst was a naturally gifted designer. Born in 1921, the American-born inventor would conceive more than 120 unique designs throughout his life including a vertical timber harvester, a system for measuring the quality of mixed cement and an electronic tagging system for livestock.

It was this ingenuity that prompted the then-head of Herman Miller to offer Robert a job at the company's research division. Robert accepted the offer in 1958 and set to work designing a new office concept that would eventually become the worldwide standard.





In 1964, <u>Herman Miller first unveiled their "Action Office" system</u>. Unlike the rigid rows of desks and chairs office workers were used to, the Action Office centred around a modular partition that could be moved to create distinct and enclosed working spaces. The idea behind this arrangement was that workers needed a sense of privacy without limiting their ability to collaborate with colleagues.

With this revolutionary arrangement of desks, cubicles, partitions and chairs, Robert Props had unknowingly produced the world's first open-plan office.

But there was a problem.

Despite winning countless industry and design awards, the Action Office was heavy, expensive, and incredibly difficult to assemble. All the awards in the world couldn't make up for the fact that it simply didn't catch on in the offices of the '60s.



Undeterred, Robert Propst and his team at Herman Miller went back to the drawing board, literally, and set out to create the same aesthetic and function as the first Action Office but made with much cheaper and more lightweight materials. Much like the original iteration, would be comprised of three walls, obtusely angled and movable, which an office worker could arrange to create whatever workspace he or she wanted. Four years later, in 1968, Action Office II was released, and it took the corporate world by storm.

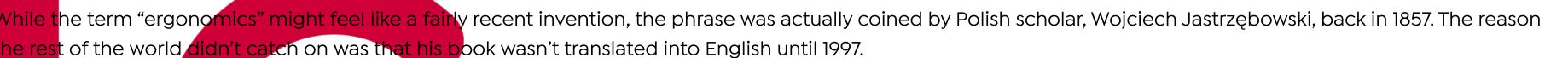
Action Office II succeeded because it was focused on the partition or mobile wall. The addition of these gave workers a sense of privacy and personalization without feeling too closed in. For the first time, office workers could decorate their cubicles with family photos, calendars, work cheat sheets and more

Coincidentally, Herman Miller's move towards cheaper, lightweight materials had some unexpected benefits. The fabric-covered partitions acted as a crude sound dampener for the hundreds of conversations being shouted across the office floor. Suddenly the debilitating roar of an office in full swing was reduced to a tolerable hum.

So, even though Herman Miller had seemingly solved the office floor plan design challenges of the mid-20th century, there was still one back-breaking issue that needed addressing.



Coming from the Greek words "ergon" meaning work or labour, and "nomos" meaning natural laws, ergonomics is the process of designing or arranging workplaces, products, and systems so that they fit the people who use them.



Despite this, inventors around the world had been experimenting with different types of bodyconfirming chairs for thousands of years.

work in a forward-leaning position.

Evidence from archaeological sites revealed one of the earliest "built-for-purpose" chairs ever made. Created around the year 1900 BC, ancient Egyptian artisans had tilted stools that allowed the user to





Fast forward a couple of thousand years to 1849 and the father of evolution was making his own improvements to the humble office chair. Sick of constantly having to get up to walk between his desk and specimen cabinet, Charles Darwin affixed clunky brass caster wheels to his beloved desk chair.

The prolific scientist's productivity went through the roof as he scooted back and forth across his laboratory with ease. Rather than inventing a quirky life hack. Darwin had accidentally created the rolling caster design that we enjoy even to this day.

That very same year, American inventor, Thomas E. Warren took Darwin's rolling design and improved it, adding a spring suspension and the ability for the top half of the chair to swivel. This meant that workers could do a whole lot more without ever having to leave their chairs.

The invention of the commercial typewriter in 1868 ushered in a whole new wave of office workers. Typists and stenographers needed a place to work, and this new role came with its own set of challenges. Typists frequently complained of back pain as a result of poor posture and it wasn't long before the old, outdated chairs were identified as the cause.





By 1904, legendary architect Frank Lloyd Wright was asked to create a new office chair alongside the Larkin Building he was currently designing.

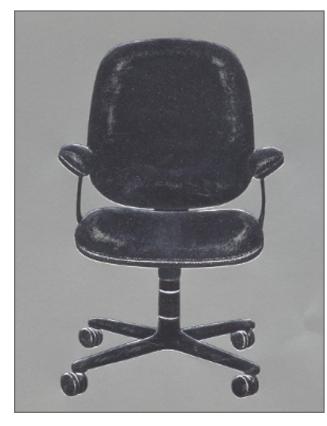
While it definitely helped improve the posture of those that used it, unfortunately for Thomas, his inventio gathered a rather insidious nickname. People started calling it the "suicide chair" as leaning back a little too enthusiastically caused the entire chair to violently tip over.



# Despite the shortcomings of the Larkin Building Chair, it, and variations of it remained the staple office chair for more than half a century.

It wasn't until the 1970s that true, ergonomic principles began to be implemented in office chairs. Bill Stumpf, a designer employed by Herman Miller, had spent years studying orthopaedics and the postural positions of office workers. One major pain point, especially for women in the office was that the current batch of office chairs weren't height adjustable. Traditional office chairs rarely lowered any more than 46 centimetres from the ground, despite the average female leg measuring 40 centimetres from the floor to their thigh.

Using this knowledge, Bill created the "Ergon Chair" in 1976, the world's first ergonomically friendly office swivel chair.



It featured a foam-filled seat and back, more complex spine support than ever before, gas-lift levers to adjust height and tilt, and five-star legs with easy-glide castors.





At the same time, two other designers were working on their own version of the ergonomic office chair. Emilio Ambasz and Giancarlo Piretti created the Vertebra Chair in 1976 which featured two flexible armrests that mimic the natural curvature of the spine. As users of the Vertebra chair leaned forward and back, the backrest moved with them providing constant support and increased comfort.

The Vertebra chair would go on to win the ID Award for Excellence of Design in 1977.

So, with the evolution of the office plan and office chairs, all that's left is to upgrade the desks.

#### Office Desks Also Get a Reboot

While we can't definitively name the original inventor of the standing desk, we do know that they did have at least one famous user way back in the 16th century. Legendary Italian polymath, Leonardo da Vinci was a superfan of standing while he worked. It doesn't matter whether he was drawing, sculpting, painting, or inventing the gizmos of tomorrow - he did it all from his fixed-height standing desk. In fact, in 1503, perched over the same standing desk, Leonardo Da Vinci completed his most famous piece of art, the Mona Lisa.

Fast forward a few hundred years and future US president Thomas Jefferson was busy writing early drafts of the Declaration of Independence. He too was a fan of the standing desk, albeit with one condition - he liked the freedom to have a desk he could both stand and sit at depending on his mood. For this reason, Jefferson had a six-legged, adaptable table made and installed in his Monticello study.



Despite their popularity, most standing desks were rigid and fixed in place, offering a standing-only experience. They were generally built for a specific user's height and dic not include an option to easily adjust. For this reason, the standing desk remained largely unchanged throughout the last century before innovation and technology caught up. Yes, the industrial revolution came for office furniture too, giving it a facelift and an engineering overhaul to match. This meant that a few different types of heightadjustable standing desks began to emerge.



In 1998, Danish company <u>LINAK released the first</u> motorized, electric standing desk named the DL1. It featured a desk panel for easy adjustment, an advanced control box and an electric leg that lifted vertically.

Standing desks would be used throughout history with

routinely taking their place behind them. From Ernest

Hemingway to Winston Churchill, Charles Dickens to

Stan Lee – some of the world's most intriguing works

politicians, authors and prominent world leaders

were penned on a standing desk.

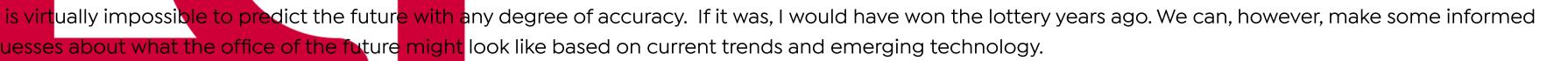
The concept slowly began gaining traction, and over the next two decades, improvements to the motors, mechanisms and materials saw huge leaps in efficiency, safety, and the maximum weight these desks could hold. There was also a noticeable reduction in the size of the motors as much of the mechanism could be hidden inside a desk's telescopic legs.



Today, most electric standing desks are sleek, low profile and similar in dimensions to most fixed-height standing desks. In fact, if it wasn't for the tiny desk-mounted panel and a little bit of extra weight, most people would struggle to tell the difference.



So, with the modern office plan, the ergonomic office chair and the electric standing desk all bringing us into the 21st century, what does the office of

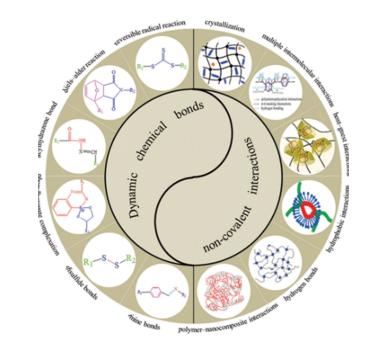


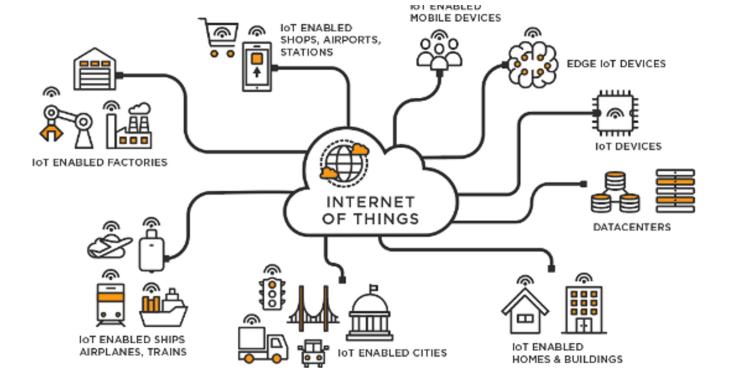
**Sustainable Practices** 

As eco-conscious practices continue to spread throughout all facets of life, office furniture might see a dramatic shift in which materials are used in its manufacture. Expect a focus on the use of recycled materials, plastic alternatives, and eco-friendly manufacturing.

# Self-Healing Materials

Recent leaps and bounds in nanotechnology and aptly-named "self-healing" materials mean that the future office furniture could be close to indestructible. Self-healing polymers can recover from cuts, scratches, and minor damage over time, removing the need for repairs, touch-ups, or new paint jobs.





#### Integrated Smart Technologies

need to stand up and stretch from time to time.

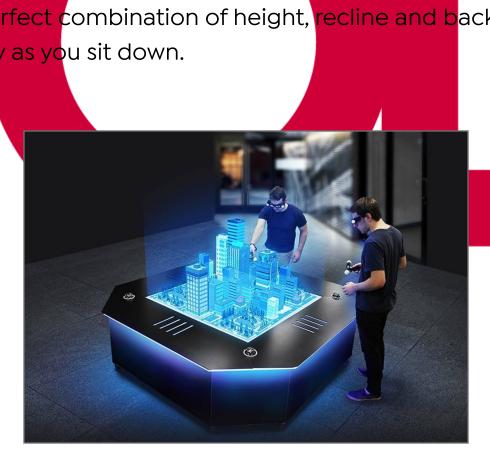
With the proliferation of smart technologies and the Internet of Things (IoT), there aren't many items still left that aren't connected to the internet. This trend is likely to continue with smart sensors and internet-connected components built directly into the office furniture we use.

Picture an office desk that can take biometric readings from you while you work. The smart office desk of the future could essentially function as a giant Fitbit, silently gathering data about your hydration levels, blood pressure, glucose readings and much more. It could offer recommendations on the best time to have lunch, suggest walking breaks or remind you that you

Even better still, how about an office chair that remembers exactly the way you sit? When you've figured out the perfect combination of height, recline and back support, the office chair of the future will remember your preferred posture profile and configure itself automatically as you sit down.

#### Virtual and Augmented Reality (VR & AR)

Facebook/Meta has already bet several billion dollars into developing the Metaverse. Whether or not that bet pays off is still anyone's guess, but it's hard to argue against it being the next big thing in technology. Companies are already starting to experiment with virtual and augmented reality and it has proved exceptionally useful already in the world of design, planning and architecture. Future offices could feature holographic displays, augmented interfaces, and virtual reality meetings in 3D space.





#### **Goodbye Cubicles**

When Robert Propst first suggested the iconic office cubicle, he never intended for millions of people to be forced into depressing corporate coffins. He envisioned a work environment with collaboration at the forefront and was actually dismayed at how the Action Office II was eventually used. Thankfully, cubicles are on the way out and open collaborative spaces are in.

Rather than tall, view-obstructing partitions, the office of the future will likely be equipped with privacy screens that can be activated or deactivated with the flick of a switch. Improvements in acoustic treatments mean that you'll be able to turn the ambient office noise on or off, just like you do with noise-cancelling headphones.



# The Home Office

All of these predictions so far assume that the office will still exist in the next few decades. We've already seen a dramatic shift towards remote working over the past couple of years and there's no reason why this trend won't continue. This change will probably have several different impacts on the evolution of office furniture. For starters, the line between home and office furniture will be blurred even further. Remote workers will still want to use their PC and home office after hours for personal reasons, so it's likely that we'll see gaming elements crossing over into the world of business. Keep your eyes peeled for work desks adorned with LED lighting, profile-based seat configurations, and chairs that massage your weary muscles after a long day's work.

# Only Time Will Tell



Predictions are one thing, but only time will tell if we end up in a dystopian copy of the Jetsons. One thing is for certain though. At OLG, we'll be one of the first wholesalers to bring the latest trends and integrated technologies to market. We pride ourselves on not only having our finger on the pulse of innovation, but also being directly involved in its evolution at the manufacturing level.

#### We're Only a Phone Call Away

If you're looking to fit out a large office space and want to install the latest in cutting-edge technology, give us a call at 02 8188 2732 and we can discuss your options.

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Still not convinced? These are just some of the reasons OLG is the preferred office furniture supplier for so many Australian resellers. If you need help choosing the best furniture wholesaler for your business needs, feel free to drop us an email at info@olgoffice.com or give us a call on (02) 8188 2732.