

Industrial Evolution

How Businesses are Responding to Disruption
in the Construction & Property Sector



“Disruption in the business world is nothing new”



CEOs have always had to plan for the ongoing evolution of business environments and markets. Today's business environment, however, is different. The pace of change is challenging for its leaders. It creates a level of complexity that is overtaking their ability to process and make effective decisions.

Odgers Berndtson interviewed 20 Chief Executives and Managing Directors across the Property and Construction sector in Australia and New Zealand to better understand the complex business landscape in which they operate. We asked what types of disruption are challenging their leadership teams and how they adapt to survive in an uncertain business world.

Although there was some disparity between how different businesses responded to disruption; either driven by the capabilities of the leadership team, or what they consider those disruptors to be, there were some key themes to emerge across these leaders which will be addressed in more detail. These were:

- Digital transformation
- Globalization
- Rate of change
- Inclusivity and diversity



KNOW THE LANDSCAPE

DIGITAL TRANSFORMATION

Construction and Property companies have eagerly integrated digital technologies into their armory to try and stand out from the competition. However, the process seems to be more adoptive than adaptive and less about being disruptive, more about keeping up with the pack. Businesses are using more and more digital processes and tools to produce 'digital estates' which makes it faster, safer and cheaper to produce end product. This really challenges businesses because it erodes teams by making roles defunct, which in turn puts pressure on human capital to retrain and reskill the workforce.

The impact of digital transformation on the competitive landscape should not be underestimated. SME's today are significant challenger brands to MNC's because they are able to do everything that they can do, only faster and leaner. Many businesses now have a key strategic aim for digital in their business plans, but with the pace of change being so fast, it is a constant financial investment which can have significant impact on profitability for some.

The key means by which leaders saw the industry to be digitally disrupted are:

- Virtual Reality/Augmented Reality
- 3D printing
- Wearable tech
- AI

VR and AR

...open up an entirely new realm for architects and designers to test the limits of their imaginations. In fact the industry has embraced the use of these technologies so readily that entirely new career opportunities have opened up, and the demand for talent has driven construction and property businesses to look outside of their own industries and toward tech and video game designers to find the talent they need to maintain a competitive edge.

3D Printing

...has the potential to be a significant game changer in the construction sector as it can be cheaper, is more consistent in production, offers safer and healthier manufacturing sites, and is environmentally friendlier through reduced waste. The 'but' is that for it to be truly effective production needs to be on a grand scale, which means wholesale adoption of the processes and techniques. Additionally, the logistical implication of having a central manufacturing facility from which your product arrives works well in countries like the UK, but would be stress tested with a country the size of Australia.

Wearable tech

...is a really exciting area of growth in an industry which is inherently dangerous for its workforce. There are exo-skeleton systems that allow operatives to lift and haul materials far beyond physical limitations, smart watches and even hard-hats that can monitor vital signs such as heart rate, blood pressure and dehydration levels; enabling both prevention and early warning to dangerous physical injury.

Artificial intelligence and machine learning

...really does open the door to some very interesting potential for the design limits of future buildings, finding patterns in big data to improve building management systems, and to improve delivery efficiencies by a significant factor.

‘No company has ever successfully disrupted itself, it has always been disrupted by external forces’

Some businesses tend not to run with the pack, in fact they thrive on being independent of the status quo. Their uniqueness and their passion for driving forward and breaking boundaries makes them disruptive by their very nature. One such example of this is UK based Anglo-Irish contractor Laing O’Rourke, who over the past few years, driven by founder Ray O’Rourke, has seriously tested the appetite and potential for a different way of delivering construction projects. The traditional methods of project delivery are challenging, and the processes have hardly changed in decades, albeit often refined, so they have been iterative and not transformational; not truly disruptive.

Under a UK government initiative Laing O’Rourke UK and 21 Consortium partners were awarded £22.1m grant funding to support R&D, Capital Investment and training in advanced manufacturing capability for the construction industry supply chain. Design for Manufacturing and Assembly (DfMA) is a process whereby the manufacture of modular and off-site pre-cast product drives far greater efficiencies via a collaborative approach with architecture, design and delivery supply chain. It is hoped to be a means to address the gap in housing supply by creating a new facility for 10,000 new homes each year and help deliver the UK Industrial Strategy for Construction, targeting:

33%
lower costs

50%
faster deliver

50%
lower emissions

50%
improvement in the import
export trade gap

This will create over 1,000 new sustainable and highly skilled jobs and apprenticeships throughout the supply chain.

On face value this appears a fantastic outcome for all of the stakeholders, yet it still remains the exception rather than the rule. A real lethargy exists across the industry to adopt this method of construction even when it’s possible to reduce cost by 1/3rd, the programme by half and also produce an environmentally friendly product that plugs the import export trade gap. Our industry is lagging behind the automotive and aerospace sectors in terms of innovation and methods of production, yet we have some truly exceptional minds who could cause really positive disruption to the way we do things. Why aren’t we lobbying government more to support the Australian manufacturing industries and take a leading role in this at a global level?

GLOBALISATION



Global competition in the Australian domestic market is causing significant disruption to the construction and property sector. For decades Australia has had something of a parochial industry; predominantly Australian owned and managed businesses that focused on a domestic customer base. But in recent years that has shifted significantly, and today we have a very international and diverse landscape which, for the first time, truly offers a competitive offering to the end client.

Significant market acquisitions, mergers and demergers have seen well-known brands disappear and be replaced by a new generation of business, and this disruptive consumerism of industry isn't really slowing at all. Businesses seem to want to be all things to their clients, providing a lifecycle service where they have a global reach and a local presence enabling them to bring expertise to their client across multiple sectors and disciplines.

'Leaders today need to be able to flex and be more agile.'

So how do leaders faced with the pace of technological change and the inexorable aggregation of the market place remain effective?

What was clear from these conversations was that success in this challenging environment is about agility, the willingness to surrender to the chaotic nature of change and not to be afraid of making difficult decisions. What drives this burning platform for change? Knowing that the alternative is becoming obsolete. If these decisions are wrong, then the learnings drive better judgements in the future.

'We are making strategic decisions in the knowledge that they will probably change significantly in two years' time'

The other significant challenge leaders' face because of globalization is the competition, or 'battle' for talent. How do businesses attract and, just as importantly, retain talent in an environment teeming with opportunity. The consensus of opinion was clear in this regard. Leadership. Businesses are only as effective as their staff, and to attain optimum output people need to feel engaged with the strategy and direction of the business, they need to feel safe in their work environment, and above all else they need direction and confidence in the senior leadership team. Leadership of people is fundamental to attracting and retaining staff.

'Strategy is very much the glue that keeps these leadership teams together. Where are we going? What are we doing? How do we get there?'



When computers were introduced into the office in the 1980s, people thought the rate of change was exponential, and then the arrival of the internet, Google, Facebook etc. has driven our perception of rates of change and demands for more to previously unimaginable levels. In reality it has been an arduous journey to achieve our current hunger for data and information, but we are now achieving step changes in decades instead of centuries, and our expectations are always upward. According to an evaluation by IBM, “90 percent of world data has been created in the past two years”, which tells us quite strongly that the demand for big data, analytics, AI etc. as a means to differentiate and disrupt industry is hugely underestimated.

In our industry we are far too often guilty of not thinking big enough or far enough ahead, the timescales to make decisions on major infrastructure projects are slow and we pay too much for what we receive. Why are we so risk averse? It limits our ability to shape our environment; we become reactive which results in our infrastructure never being leading edge and often not fit for purpose.

‘We are spending strategy sessions at Board level talking about the rapid pace of change and how to deal with.’

Construction has not truly innovated over recent years. There has been an evolutionary change in some processes and methodologies, but nothing truly revolutionary. Modularisation and prefabrication have both been around since the 1920s, yet it is still not being adopted by the mainstream, and many businesses continue to try and adapt techniques to make it viable. It is likely that unless a technology or a process is transformative or impactful across industries that a revolutionary change will occur, instead we will experience incremental evolution.

Humans are a naturally disruptive species. The same ingenuity that can reach the moon, or send a robot to Mars can also be hampered by the reluctance to fundamentally challenge the way we do some very basic things. An example of this is can be found in the rail industry. The first railways built in the UK used a ‘standard-gauge’ which was arbitrarily decided upon because it happened to be the width the Romans decided for their chariots. That width was the optimum distance it required to have two horses safely gallop side by side. That ‘standard-gauge’ was exported across the Atlantic Ocean to the New World and beyond before being adapted to suit new advancements of the railway industry throughout the last 200 hundred years.

Now fast forward to 1960s Ohio in the US where they produced the rocket booster exhausts for the Apollo space craft. Arguably engineering at its finest to enable us to (relatively) safely and repeatedly shuttle astronauts to the moon and back. The weight of these booster exhausts are many tens of thousands of kilograms, and they are extremely fragile, so they need to be transported by rail freight across state from Ohio to Florida. The train that must carry this enormous rocket part operates on the same 'standard gauge', which happens to be the chariot width that the Romans decided upon some 2,000 years earlier. The Romans clearly weren't anticipating their decision would impact the future of our species and space flight, but it did so by limiting the available space that these rocket boosters had when the train reached tunnels, and posed some very difficult engineering problems.

The point is that we are, by our very nature, excellent problem solvers, naturally disruptive and solutions driven, yet we can inhibit ourselves unnecessarily and make a problem far more difficult than it actually needs to be.

If our industry wants to truly embrace disruptive technology and make a leap forward then it needs to address the inhibitors. That's what we will explore in the next section.

From our discussions with leaders across the industry it is clear that there are two main inhibitors to disruptive innovation:

1. Ignorance
2. Reluctance



In many scenarios it is feasible that people are simply unaware of the types of technologies and processes available across complementary industries. However, it is a little concerning that executive leadership teams could be unaware of what their competition are investing in, or even be unaware of the types of disruptive technologies being adopted in other sectors; automated vehicles in the mining sector, robotic assembly lines in the automotive industry etc.

‘Why haven’t we got robots on site? Why isn’t someone putting flat pack property together?’

This is the point that we blur the lines and move into the territory of reluctance. Reluctance to do things differently is the easiest position to adopt, because doing nothing requires no energy right?

Across industry this reluctance manifests itself in different ways; fear of losing jobs, taxation, ‘red tape’ etc.

The modern business world is a very challenging environment, and the pace of change and demand to stand out and be different has never been so important. Businesses need to demonstrate speed, capacity and quality of service or product to differentiate themselves from their competition.

‘Our competition has changed rapidly. We need to be agile and we need to keep diversifying or we die.’

The trouble with reluctance is that we end up waiting for already urgent problems to become critical. Transport infrastructure, social infrastructure such as schools, hospitals etc. are all pressured by population and available tax dollars to spend. Affordable housing is one area that tends to evoke an emotional response, but the plain fact of the matter is that there simply is not enough affordable or government housing to care for the poorest in our society. Modular or prefabricated housing would appear to be an excellent solution to this problem so why are governments reluctant to adopt it?





INCLUSIVITY AND DIVERSITY

It is essential for businesses to foster a culture of inclusivity if they are to improve their boardroom performance. It is well documented that companies with female board representation routinely outperform those with no women on the board, yet the most recent report from the ASX found that females only hold 28.4% of boardroom seats on the ASX 200 index, of which 75 women were appointed in 2018 (31st October 2018).

‘Diversity is about counting the numbers; inclusiveness is about making the numbers count’

Greater diversity in the Boardroom has far wider reaching implications than just ethical and social measures, it has a proven financial imperative. Diversity in the C-suite challenges ‘group-think’ and can encourage organisations to be broader in their considerations before making decisions.

‘Innovation and creativity comes from a diverse and inclusive team.’

Diversity enables collaboration that leads to better decisions, and also innovation. The different perspectives of a diverse board can create a dynamic that sets a great example for how companies can continuously improve, the same way that teams with different backgrounds and areas of expertise achieve solutions that no individual would find on their own.

Executive teams that can understand an increasingly global, diverse and disruptive market will be better placed to compete and succeed in the years ahead.

Of greater prominence over the past 12 months has been the concept of cognitive diversity; the inclusion of people who have different styles of problem solving and can offer unique perspectives because they think differently. A study undertaken by Alison Reynolds (Ashridge Business School) and David Lewis (London Business School) revealed that *“a high degree of cognitive diversity could generate accelerated learning and performance in the face of new, uncertain, and complex situations”*¹

I believe that one of the real challenges we face in the C-Suite is that businesses tend to hire in their own image, and become a large homogenous corporate entity which inherently lacks diversity. To achieve the changes needed to be inclusive and diverse we need to enable people to feel safe enough in the work place that they will share their thoughts and ideas. That would be a very exciting means to disrupt the workplace indeed.

¹ <https://hbr.org/2017/03/teams-solve-problems-faster-when-theyre-more-cognitively-diverse>

CONCLUSION

Positive disruption undoubtedly leads to transformational change

I believe that to survive the disruptive landscape of the construction/property industry, businesses must understand both the local and global market place, they must have an awareness of complementary industries and technologies, be willing to embrace risk, and they will employ leaders who have the mindset to embrace I&D in the knowledge that it fosters innovation.

Success is dependent on investment in technologies to enable faster and more flexible ways of working, they must be lean and agile to deal with the pace of change and not be frightened to make their strategic plan dynamic. Underpinning all of this is the understanding that skillsets and mindsets are equally important factors in being capable of making effective decisions to achieve strategic business goals. An inclusive and diverse culture enables and encourages freedom of expression, thought and ultimately innovation. Any business that can harness that innovation is going to be far better equipped to deal with the challenges that lie ahead.

Odgers Berndtson ANZ Head of Industrial Practice, James Simpson, conducted a thorough research project of 30 Construction and Property Executives across ANZ and noted that Managers 'not possessing the right mindset' for the future was mentioned consistently.

It's just not realistic to expect people to change if the Executive does not lead by example. Changing the mindset of the broader management team and workforce starts from the top. This has always been the case but it seems that many leaders are seeing the pace of change affecting them as individuals too. They are consciously changing the way they lead.

Is there any good news here? Can leaders find those with the right mindset, and what about the ones who don't?

The Odgers Berndtson LeaderFit™ Model and Profile is designed to identify the leaders able to thrive in a world of disruption, complexity and uncertainty.

Find out more about LeaderFit:

<https://www.odgersberndtson.com/media/6766/odgers-berndtson-leadership-disrupted.pdf>

INDUSTRIAL PRACTICE



JAMES SIMPSON | PRINCIPAL

james.simpson@odgersberndtson.com

Author

James leads the Industrial Practice of Odgers Berndtson in the Australia and NZ business. His focus is on Board level executive appointments and senior leadership roles across infrastructure, transportation, manufacturing and energy & natural resources sectors. He has more than 15 years' experience in executive search and leadership advisory, and has worked extensively in European, MENA and APAC markets. His relationships and expertise traverse public and private sector, and he is an expert in the commercial, contractual and engineering functions, successfully delivering assignments at CxO and senior leadership level.

Originally from the UK, James holds a degree in Oceanography from the School of Ocean and Earth Science at Southampton University, and post graduate qualifications in leadership from MGSM.



TIM SLEEP | MANAGING DIRECTOR

tim.sleep@odgersberndtson.com

Tim Sleep is the Managing Director for the Australia and New Zealand business. In addition to Board and CEO roles, he specialises in the technology and professional services sectors, helping build exceptional Non Executive and executive leadership teams. With over 25 years' experience in senior executive roles across retail, IT and professional services, Tim is well positioned to understand the characteristics, attributes and skills exceptional leaders require to excel in today's business environment.

Tim has a BA (Hons) degree from Loughborough University and sits on the Regional Council for RedKite, an Australian charity that supports children and young people with cancer.

62 offices in 29 countries



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