Intrapreneurship in Construction

Procore roundtable issues paper

This whitepaper is a summary of discussions at the Procore Intrapreneurship Roundtable, which was held on 13 June 2019 in Sydney. The roundtable was hosted by Procore Technologies, a cloud-based construction management software provider.

Discussion at the table covered how companies can foster a culture that encourages innovation to solve business problems, increase efficiencies, discover opportunities, and how to streamline testing and adoption. It also identified the symbiotic relationship between intrapreneurs and the technology available to them.

Intrapreneurs in the context of the construction sector are those who seek out and embrace innovative technologies and find new and interesting ways to meet OH&S targets, reduce ‘busy work’ and rework.

The discussion highlighted the potential risk for human resistance when new technologies are introduced to users. It was suggested that a sense of personal agency needed to be created for innovation results and part of that requires buy-in from senior leaders.

The attendees of the Roundtable consisted of:

+ Tom Karemacher, VP APAC, Procore
+ Brandon Terry, SVP Product, Procore
+ Danny Liston, Senior Associate, Ontoit
+ Tim Hassett, Business Manager, Spence Construction
+ Ryan Taylor, Project Manager of Operations, Villa World
+ Matt Postle, IT Process Engineer, Taylor Construction
+ David Alessi, Business Development Manager, Icon Co
+ Jamie Leach, CEO and Founder, Open Data Australia
+ George Panacheril, Group Executive of Strategy, Shape Group
+ Ivan Fernandez, Senior Fellow and Industry Director, Frost and Sullivan
+ Kylie Davies, Head of Policy and CEO, Real Estate Institute of New South Wales
+ Dr Leila Alem, Adjunct Professor, UTS
+ John Koerner, NSW State Manager, Watpac
+ Lucy Shannon, Innovation and Research Manager, TOGA

The discussion was recorded, refined and structured into this whitepaper.
1. Leadership culture decides innovation

According to those at the Roundtable, working environments that allow people to make mistakes and encourage collaboration spur innovation. The attendees agreed it’s not impossible to create this innovative culture, but it needs to start with the leadership team.

“It has to start from the top or it doesn’t have a chance of succeeding. A lesson from our experience is that culture drives performance and leaders drive culture,” said Shape Australia Strategy Group Executive, George Panacheril.

Procore Technologies SVP of Product Brandon Terry agreed, saying leaders have a responsibility to create a culture where people are willing to embrace innovation.

“The responsibility of leadership is so important to foster the right environment and conversations about the challenges they’re facing. They should not feel that they will be criticised if they are sharing those core problems,” he said.

But how do you get senior leaders to change when they themselves are resistant to it? From Panacheril’s experience, it’s about working with leaders to establish a baseline of “good culture”.

“We mapped our culture using a tool that represented it as a graphic. The goal was to have a constructive culture because that’s where innovation thrives. It’s about being encouraging, affiliative, building relationships, and having a safe environment to make mistakes and gain self-actualisation” said Panacheril.

TOGA Innovation and Research Manager Lucy Shannon insisted that people’s willingness to change comes down to their mindsets.

“You either have a growth mindset or a fixed mindset. Some people get it. Some people don’t want to know about it,” she said.

“It has nothing to do with age or background; it comes down to belief. Do they believe they can make a difference? Are they empowered to believe? If they don’t believe it, they won’t do it.”

UTS adjunct Professor Dr Leila Alem argued that even those with a fixed mindset can change.

“There’s research to suggest it’s possible to empower people who don’t have that belief. It’s not because you’re born with a fixed mindset that you’re stuck; it can be learnt. One of the drivers for learning in my experience is people wanting to future proof their career and their skills,” she said.
2. Real innovation is a commitment

The discussion also raised the point that people will only embrace and commit to innovation if they feel it is a personal choice, rather than have it added to their existing duties as another task. In the latter case, innovation would be met with resistance or token participation.

“If you understand where the value resides in the product for your customer and design the product to allow people to configure it to their own needs, then it works. It gives them agency. It allows them to make the right decision for their own sake. That’s where, if designed properly, technology can be powerful,” Dr Leila Alem said.

CEO and Founder of Open Data Australia, Jamie Leach, explained how one large mining company witnessed innovation resistance first-hand when it switched to a digital tracking system to address the issue of company drivers circumventing a paper-based safety checklist — the change was met with immediate backlash by mine site drivers.

“Drivers were angry and questioned the company’s trust in them. There was a mad scramble within the company to dress it up as being for the benefit of the drivers when they didn’t see it that way. The drivers were certainly in the wrong, but it didn’t stop them from complaining,” she explained.

“Truck tracking checklists were only accepted once there were fatalities on the site. Once there was a fatality - that’s when things changed.”

The group discussed how it’s important that companies have a clear view of what innovation should look like and ensure it’s not seen as micro-managing, big-brothering or for business profit, but rather about recognising and elevating people’s skills and wellbeing.

The participants of the roundtable also agreed that innovation should not be a public relations exercise, warning that there is a risk of some companies putting innovation on a pedestal for the sake of being innovative.

A few of the suggested options around this included:

+ Giving feedback to build relationships and create opportunities for collaboration
+ Setting up realistic expectations
+ Promoting transparency around decisions through the storytelling of “showing not telling”
+ Sharing responsibilities to complete a project
3. Intrapreneurs want recognition

The roundtable attendees also uncovered how intrapreneurs are more likely to engage with the Internet of Things, wearables and other similar technologies, when the solution clearly supports wellbeing compared to those that support a business’s productivity and profits.

“People are worried about being less efficient than a machine, which to them poses a risk of losing their job. It’s a common and difficult fear to overcome,” Villa World Operations Project Manager, Ryan Taylor said.

Real Estate Institute of New South Wales’ Kylie Davis empathised that people are frightened to embrace technology because there are connotations associated with a known technology that predetermines how people react to using it.

“When I told 50 journalists as part of data journalism training that we were going to use Excel, I had journalists telling me, ‘I don’t do that, I just use Word’, because, from a journalist’s point of view, Excel was a tool used by management to track performance, salary and how many people to cut,” she said.

“I worked out who was interested, who was cautious and who was disinterested. I lost two people out of that but when I looked at the bell curve, I noticed a lot of fear - fear of taking the time to learn new things - and some laziness, but some of it was simply hanging on to old behaviour.”

Frost and Sullivan Senior Fellow and Industry Director, Ivan Fernandez agreed by saying, “Everyone has a feeling of fear and obsolescence. Those who overcome that fear, tend to be more open to technology going forward.”

Open Data Australia’s Jamie Leach suggested one of the quickest ways to get people to adopt new technology is to “exacerbate a pain point where it becomes unbearable and then propose a way to change that. “People have to almost boil in a sauna before they accept a new way,” she said.

Or, as Brandon Terry put it in Procore Technology terms, it’s about driving acceptance through “autonomy, mastery, and purpose.”

Leach said that when people see technologies can support wellbeing, “Staff are happier, there are fewer angry customers, issues are resolved faster, and staff are being redeployed or re-educated because newly empowered staff have extra time to give to other areas of the business. Once you have the right mentality, you will see a massive improvement to the business.”
4. Standardisation of data and 5G connectivity

When the roundtable participants discussed how companies can take advantage of internal data, two key themes were identified.

The first was that there is a shared understanding that data is essential, or as Kylie Davis puts it, “data is the oil that goes into driving the technology.”

The other view is that data needs to be acted upon to promote innovation. Part of that discussion divulged into understanding what data standards need to be set universally and whether it should be directed by the Australian government, similar to how data has been organised in the United Kingdom and the European Union, or by companies themselves.

“Standardisation of data, from the terms and names used, is of huge importance,” Ontoit Senior Associate Danny Liston said. “It should be a government mandate, or companies need to collaborate better across the asset lifecycle to agree on standards, otherwise the digital process gets bottlenecked and innovation stifled.”

However, all agreed standardising data is not simple. Icon Co Business Development Manager, David Alessi, acknowledged implementing a standard on a wide scale would have its challenges. “It’s currently difficult to get a standardised process across a large company’s own internal projects not to mention the ones involved with government,” he said.

Open Data Australia CEO and Founder Jamie Leach suggested that standardising data terminology within companies for the purpose of activities, such as procurement, “would be a reasonable first step that would show an enormous step-change.”

Kylie Davis added, “Standardising data would at least reduce the amount of time needed to translate it across different systems, potentially leading to faster innovations.”

The conversation about data also sparked discussions about 5G connectivity. The attendees highlighted how valuable 5G will be to companies requiring large amounts of data to be quickly transferred. This would include data sets produced by connected devices, such as road freight and fleet tracking telematics.

“5G will break down barriers between levels of people within the same company,” said Taylor Construction IT process engineer, Matt Postle.

“People on site — who have the knowledge but not the same speeds to communicate, execute or support their ideas, as head office might have, will be emboldened. I also expect people on site who are averse to technology because of how slow it is on site will be more willing to adopt it.”
Conclusion

Intrapreneurs are helping to lay the groundwork for the future vision of a business, even among some of Australia’s most established industries.

Individuals within the construction sector are showing signs of a commitment to embrace innovative technologies, if the innovation is useful within their own contexts and not forced upon them. When leaders recognise the human side of innovation, innovative individuals find new and interesting ways to drive efficiencies and meet OH&S targets using technology.

Standardisation of data and 5G connectivity are also crucial to promoting innovation and developing the right solutions to future proof a business.