Constructing Building Integrity: Raising Standards Through Professionalism

Industry Factsheet:

Integrating Profit, Quality and Ethics

October 2024

Associate Professor Zelinna Pablo
Professor Kerry London
Dr Barbara Bok

Torrens University Australia

Overview

The Australian construction industry has long been criticised for the prevalence of unprofessional behaviour, which leads to poor quality residential high-rise dwellings with life-threatening defects. Past investigations locally and internationally across the entire industry have typically indicated that culture is the problem; often leading to regulatory reform. However unprofessional behaviour persists, suggesting that solutions beyond regulation are needed.

Our three-year study provides compelling evidence that unprofessional behaviour arises from multiple interlocking causes that entrench construction industry professionals in 'ethical tensions', compromising their ability to make decisions. Tensions are entrenched in the industry characteristics of aggressive competition, low profit margins, fragmentation, exploitation, toxic cultures and work overload. Collectively, these characteristics hinder professionals' ability to manage another tension: price versus non-price goals. Our study reveals this tension in a specific form: a widespread belief that quality dwellings can only be achieved at the expense of profitability.

We now have empirical evidence that this trade-off is not inevitable. This fact sheet describes a case study where a construction company successfully integrated profitability, quality and professional behaviour in ways that have helped raise professional standards, reduce defects, enhance public trust and enhance financial performance. We explain in this Fact Sheet how this effort can be scaled up beyond a single organisation, into a systematic large-scale effort across Australia. The case study is part of a larger empirical research study which included semi-structured interviews with construction managers and focus groups with regulators and peak bodies in the construction industry. We completed analysis on the data, then created detailed conceptual maps such as influence diagrams, integrity systems and Bayesian networks to understand what drives and hinders professional behaviour. This fact sheet should be read in parallel with the industry report – <u>Constructing Building Integrity: Raising Standards Through Professionalism</u> – which describes the full scope of this work, methods used and recommendations.

Case Study

When questioned about the relationship between profitability, quality and professional behaviour, many interviewees believed that economic pressures often compromise quality:

'So if you've got all these increasing costs, high land value, high construction costs, the return on investment is obviously diminishing and sometimes it's going to be negative. So to make any money, they have to cut their losses, they may be selecting inferior building products or inferior subcontractors to carry out the work which is going to lead to quality issues later on for the homeowner'.

- Interviewee 7 (Regional Director, multinational builder)

The observation is reflective of the aggressive competition tension, 'the race to the bottom' where a professional compromises quality due to pressure to be price-competitive. Aggressive competition also drives the work overload tension where a professional is overloaded with too many key tasks to

deliver professional quality services. When carried to the extreme, aggressive competition gives rise to the **problematic culture tension,** referring to a toxic industry culture which is collusive, litigious, adversarial or aggressive.

The industry is underpinned by networks of supply chains, which should, ideally, be collaborative. In practice, the **fragmentation tension** prevails as professionals' roles and responsibilities are siloed, which can lead to professionals struggling to work together to deliver a quality outcome. Interests, goals and agendas may not align and actors are often keen to divert risks to others. Subcontractors, especially small ones, have been described as vulnerable when it comes to risk allocation, exposing them to **the exploitation tension**.

One business that we profiled, a multinational builder, experienced these tensions for many years. Their strategic response initially involved a Design and Construct procurement strategy focusing heavily

on efficiency, with an emphasis on minimising construction time and cost. Over time, they realised that the savings they thought they had achieved were eventually offset by the cost of having to address defects in their completed buildings.

'...we did a review in about year 10 after we'd done all those projects and what we'd found was, yeah, we'd made some money at the time, but we basically spent it all fixing things that we didn't build that well, right?'

Interviewee 2 (Regional Director, multinational builder)

The company intentionally stepped back from the residential market, prepared to relinquish its niche if necessary. After considerable reflection, they chose to remain in the market – but only after developing a new business model underpinned by profitability, quality and professional behaviours. At the core of this business model was the development of physical prototypes that addressed their key recurring defects.

They also found over time that these prototypes solved another entrenched industry-wide problem: they successfully integrated disparate technical standards. The success of these prototypes led the company to decide that moving forward, they would adopt this way of building. Their supply chains responded and shaped their practices and processes around these prototypes.

As the number of prototypes increased, the company decided to set these up in a physical "Centre of Excellence" in New South Wales. Regular visitors include subcontractors, designers, professional associations and other supply chain actors. Recognising the Centre's potential as a vehicle for skill development, the company set up training programs around these prototypes.

The case study is an example of a company promoting a culture that drives building quality beyond their organisation, across their supply chains and to the larger industry. Adopting this strategy has reportedly slashed defects by 85 percent. The Centre is now reasonably well-known in NSW.

Pathways to Action

With the right mechanisms, the benefits of this case study could cascade across the industry. Thus a key recommendation in our study is scaling up this strategy into a government-led network of Centres of Excellence in Residential Apartment Housing across states and territories. For context, the overall study made five General Recommendations, published in our *Final Industry Report*. To support General Recommendations 1 and 2, we also developed four Specific Recommendations for the Construction Management profession. **Figure 1** shows that the proposed Centre of Excellence is part of both the Specific and General Recommendations.

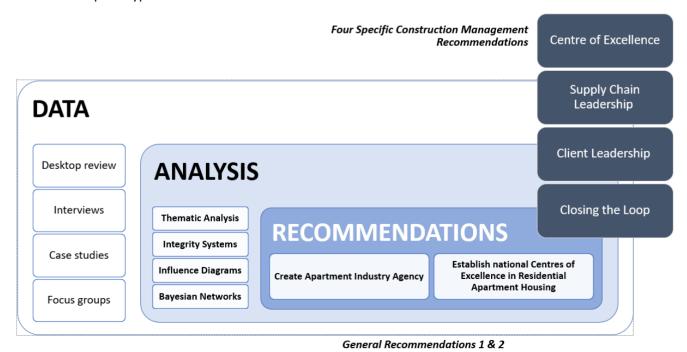


Figure 1: Data, Analysis and Recommendations

Key lessons from this case include:

- Prototypes built on integrated standards are powerful mechanisms to address supply chain fragmentation and defects, as they drive collaboration between trades and professions, as well as improving quality
- Market leaders like construction companies can accommodate profit alongside quality, as the two goals are not necessarily mutually exclusive
- In reconciling profit and quality, market leaders can influence professional behaviour across the supply chain.

To scale up the Centre of Excellence, exemplar clusters within each state, similar to the one in NSW, would be identified and come under a national umbrella to create a National Centre of Excellence.

State and territory governments, supported by Commonwealth government, would identify a leading cluster of actors (a supply chain comprising developers, construction managers, architects, engineers, subcontractors, etc.) in each jurisdiction. Alternatively, supply chains could self-nominate. The supply chain, supported and incentivised by government, would define quality construction methods, based on their own apartment planning, design, construction, sales and management processes.

Initial focus would be on the integration of design and construction for detailed design quality, uncovering and resolving conflicts between work functions and between standards, leading to prototypes that address constructability challenges in priority areas (e.g. waterproofing balconies and showers, fire wall construction and penetration and brick wall construction).

Prototypes would be developed to underpin sound business models and professional integrity principles. Client leaders, both private and public, would create project environments where project plans, tendering requirements and contracts support the use of these prototypes and, more broadly, this business model.

Later, lessons and best practices would cascade to education and training programs, captured in standards then possibly incorporated into regulation.

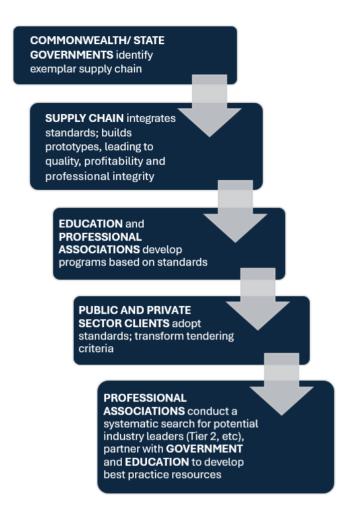


Figure 2: Pathways to Action

Figure 2 shows that while the effort begins with the Commonwealth, state governments and exemplar supply chains who either self-nominate or are nominated, collaboration across different professions and sectors is fundamental.

Emerging, aspirational and established professionals, previously siloed, will achieve new levels of cohesion through integrated standards embedded in prototypes. Education and training organisations can progressively incorporate these new standards to enable the labour force to rebuild knowledge and skills which, according to many of our interviewees, have diminished across the industry over time.

Private and public sector clients will take on leadership alongside other market leaders. They can mandate or incentivize supply chains, through project requirements and tendering criteria, to pursue goals that balance quality, profit and professional behaviour.

Professional associations can also fuel these efforts further by creating resources and advocacies around best practices.

FURTHER READING

A version of this fact sheet has been published under:

London K, Bok B, and Pablo, Z. (2024) 'Building companies feel they must sacrifice quality for profits, but it doesn't have to be this way'. *The Conversation*, October 9. https://theconversation.com/building-companies-feel-they-must-sacrifice-quality-for-profits-but-it-doesnt-have-to-be-this-way-239821

PROJECT RESEARCH

Reports on Construction Management professionalism arising from this project can be found at: https://www.torrens.edu.au/research/featured-research/unpacking-professionalism-in-the-housing-sector

Additional research arising from the project (including the Final Industry Report) can be found at: https://www.griffith.edu.au/law-futures-centre/institute-ethics-law-governance/our-research/construction-building-integrity

CITATION

Pablo, Z., London, K. & Bok, B. (2024) *Industry Fact Sheet: Integrating Profit, Quality and Ethics*. Griffith University, October 2024.



