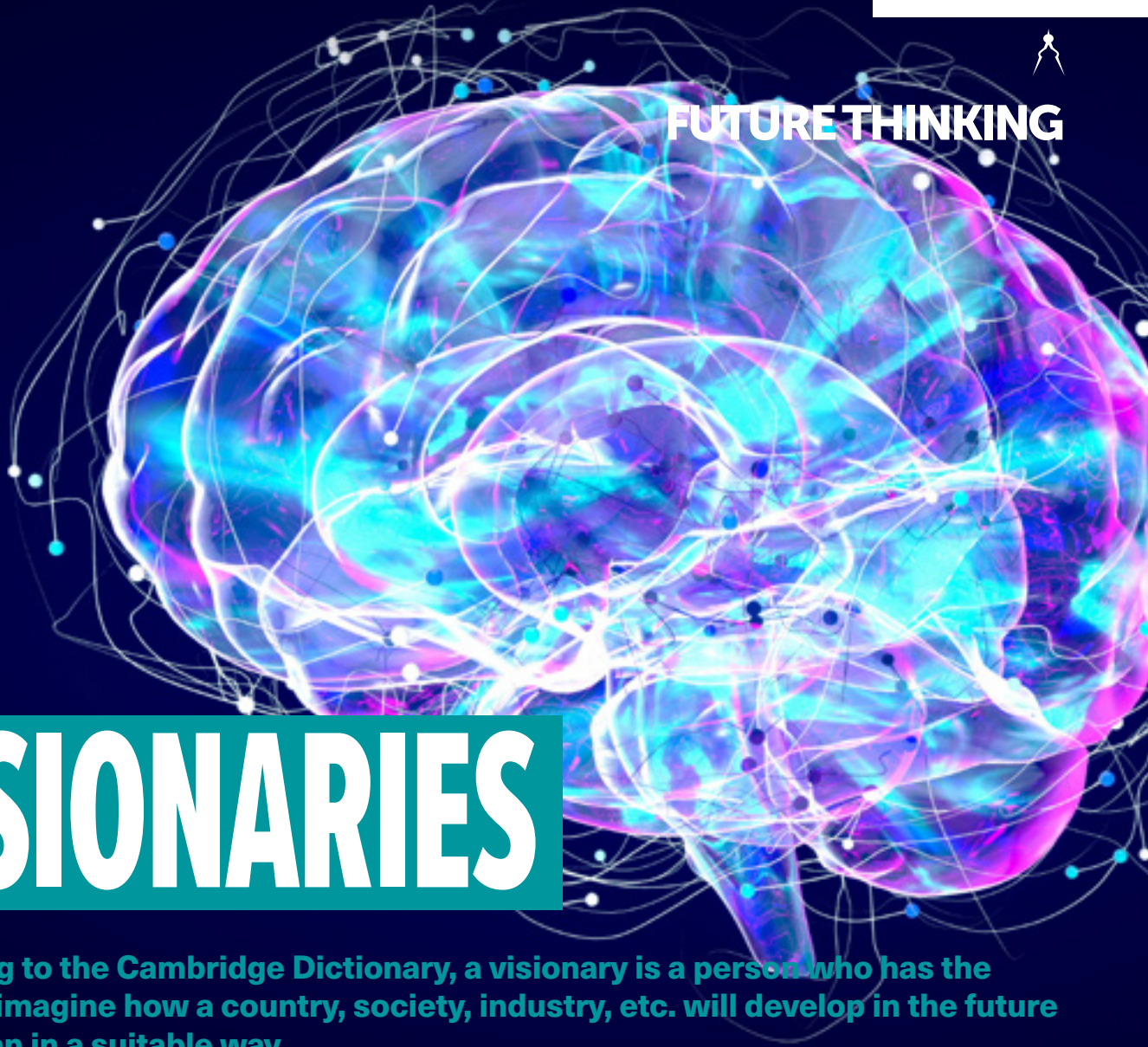




BUILT ENVIRONMENT ECONOMIST

AUSTRALIA AND NEW ZEALAND



VISIONARIES

According to the Cambridge Dictionary, a visionary is a person who has the ability to imagine how a country, society, industry, etc. will develop in the future and to plan in a suitable way.

AIQS has handpicked two Fellow CQS members to tell us about their visions for the construction industry and quantity surveying profession.

TONY AVSEC FAIQS, CQS

Looking into my crystal ball on my desk (yes, I do have one), after over 40 years so far in our industry (that's a scary thought when you put it in writing!) where do I see and hope our industry will be in the future?

I'd love to see the true embracing of the manufacturing mindset and Lean Six Sigma (think lean construction). Think about what Toyota did in the 1990s with the focus on reduction in the parts count on the final assembly line. For us, that's the construction site. If we can work out how best to break up a building into

larger, but still easily transportable and industry standard components on-site, there would be a massive reduction in on-site labour.

Cross-laminated timber buildings have already demonstrated this even without adding the next level of robotics to take away the repetitive, and sometimes inherently dangerous, tasks on which we spend a small fortune to protect a fragile human being. We're there on some parts, like curtain walling and bathroom pods, but we are still not fabricating those off-site modules like a true manufacturer to improve their cost competitiveness.

The COVID-19 pandemic has accelerated industry change, showing us what is possible, collaborating remotely. It's now possible to get input easily from a specialist from anywhere in the world. Much travel time has been saved but it relies on all attendees being savvy with the technology. With your own project using cloud-based Google Streetview style apps like Openspace for virtual site visits, and virtually collaborating over your project BIM in MS Teams with Revisto, it amazes me what is possible right now if we can embrace the future.



FUTURE THINKING

BOB RICHARDSON FAIQS, CQS

"We cannot solve our problems with the same thinking we used when we created them." Albert Einstein

About every decade I have heard that quantity surveying was doomed by a new technology and the rise of people who thought the quantity surveyors' task was simply technical. Those doomsters were clearly wrong and here we still are having adapted to whatever changes and challenges were thrown our way.

Many ideas and predictions in my experience, rarely occur in the time predicted if ever. How many predicted the global financial crisis of 2008 or the pandemic of the last three years!

Take all predictions with a pinch of salt!

Change tends to be evolutionary rather than revolutionary.

In the last ten years the speed of change particularly in technology can feel understandably overwhelming.

Two types of QS will emerge

1. The technology advanced knowledge cost engineer or
2. The client-focussed manager

Knowledge Cost Engineer

The knowledge cost engineer will be an expert in all forms of technology i.e.:

- BIM
- Artificial Intelligence (AI)
- Advanced Software technologies
- Additive manufacturing techniques
- Digital mapping
- Blockchain
- Virtual reality and augmented reality,
- Robotics and automation
- Prefabrication and offsite construction

The good news is that no knowledge cost engineer, artificial intelligence, or expert

system will be a substitute for human decision makers and the need for a human sanity check on outputs produced.

Client Focussed Manager

The client focussed QS will increase the intangible benefits beyond the traditional roles of service delivery.

The fundamental needs will be to pay attention and seek to understand a client's issues, situation, and business drivers not merely the building or infrastructure they are wanting. Few of us really practice this approach. Such focus develops trust, helps define problems and encourages the sharing of information and collaboration. Anything less than "the client's interest comes first" brings into question whose interests we are serving.

The future skills of the QS will need to be more adaptive and digitally focused.

Construction will need to adapt, be collaborative and attract people from a different diverse, cultural, and technical background such as strategists, space scientists, anthropologists, cognitive and systems thinkers, data analysts and data scientists, digital operatives, and robotic programmers.

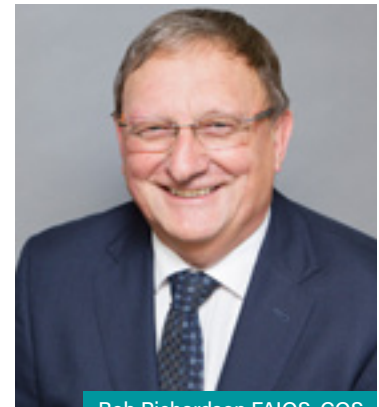
I have always believed in the concept of Total Cost Management (TCM) in which cost managers/quantity surveyors apply their professional and technical expertise to managing cost throughout the life cycle of any enterprise, program, facility, project, product, or service.

Governments struggling to establish economies impacted by the pandemic are looking to the construction sector to help stimulate the economy again through the built environment and infrastructure we need.

Whatever the future holds we must adapt and embrace it and take a more valued position. The new sectors and technologies are a great opportunity to do so.



Tony Avsec FAIQS, CQS



Bob Richardson FAIQS, CQS

Sources / References

- Australian Institute of Quantity Surveyors (2012) Cost and Management Review
- Royal Institution of Chartered Surveyors (2015)
- Cunningham (2014) and Shafie et al. (2014)
- RICS News & opinion (2020)
- Emily Segal novel Mercury Retrograde, by Deluge Books.
- Susskind & Susskind (2015)
- Trusted Advisor Associate (2021)



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