

THE ROBOTIC BRICKLAYER

A Western Australian invention has the potential to automate the job of bricklaying. Master Builders director Michael McLean reports on the robotic bricklayer and its likely impact in the housing industry.

WE are all aware that technology has changed our lives significantly over the last two decades, especially in relation to electronic communications and the internet. Just ask Australia Post. Some commentators have even reported that we are going through another industrial revolution. How exciting!

At a recent Master Builders function we had the pleasure of hearing from Mr Mike Pivac, the CEO and Executive Director of Fastbrick Robotics. This is a Western Australia-based company which has the potential to revolutionise the housing industry through the automation of the bricklaying process from the design stage to completed brickwork.

Fastbrick's technology has been developed to complete the brickwork of an average house in one to two days at significantly lower cost and higher quality than traditional methods.

Although this is not something that is going to happen tomorrow or next year, I believe it is going to be a 'game changer' in providing more affordable housing to future homebuyers.

I agree with Mr Pivac that the robotic bricklaying machine will not replace bricklayers entirely. Those with exquisite workmanship skills will remain in high demand for historical, heritage, restoration and high-end jobs.

For straightforward entry-level housing, the robotic bricklayer does have a future and will benefit many of us. It will reduce waste, minimise health and safety risks, provide precision laying and create accurate cost controls. These homes have the potential to be built quicker, safer and at a lower cost.

Make no mistake, the robotic bricklayer is disruptive technology. Its purpose is to replace the jobs performed by many bricklayers, but it will help make housing more affordable. And that has to be a good

thing in the public interest.

There have been many examples of artificial intelligence influencing our lifestyle in recent years. The robotic bricklaying machine provides one of the first examples where a robot is actually moving outdoors to perform a practical function.

One of the world's leading manufacturers of construction and mining equipment, Caterpillar, has identified confidence in the Pivac invention by investing in the business. Likewise, the Kingdom of Saudi Arabia is keen to purchase 100 of the machines to help meet high levels of future demand for housing in its region.

One of the advantages of the robotic bricklayer to the housing industry will be its ability to provide a more stable pricing regime in contrast to the huge fluctuations in price for bricklayers during industry booms and downturns.

It has become increasingly difficult to attract young apprentices to learn the bricklaying trade and many brickies end up with a bad back in later years. The robotic bricklayer will help overcome these problems.

Once robotic bricklayers are put into operation, I believe they will capture the imagination of builders and homebuyers alike. This technology won't suit everyone, but it will provide a real choice. And that is good for everyone.

I hope the WA and federal governments get behind this invention to ensure that we will have the opportunity to manufacture these machines in Australia. The team behind the robotic bricklayer will clearly need financial assistance to establish the capacity to manufacture hundreds of machines to satisfy demand.

This is another example of an amazing Australian invention. Hopefully we won't lose the chance to brand it as our very own.

