How FBR Ltd took Wall-as-a-Service® from concept to reality

As a start-up, construction technology company, FBR knuckled down and weathered the Global Financial Crisis (GFC). Today, as the world faces a new emergency, ASX-listed FBR has risen to meet the moment, with revolutionary bricklaying robotic technology that can keep construction moving, and actually accelerate it, even in a pandemic.



Reshaping construction

It was a shortage of Western Australian bricklayers back in 2005 that led FBR founder, Mark Pivac, to create a robot that could lay bricks.

After a strong start, the GFC saw investors pause. FBR's robotic technology spent several years in the wilderness until 2014, when the concept of a bricklaying robot piqued the interest of investors for a second time. By 2015, FBR had listed on the stock market and was working towards proof of concept for its second generation bricklaying robot, Hadrian X[®].

Laying the foundations

FBR lost no time and successfully developed Hadrian X® into a dynamic bricklaying robot. The robot showed it could work in outdoor environments, under different weather conditions, at new locations and take on new tasks every day. Hadrian X® also proved it could lay bricks so precisely that construction adhesive could be used instead of mortar.

As a result, FBR soon secured a memorandum of understanding with Saudi Arabia to potentially build 50,000 new homes and an agreement relating to a strategic collaboration with GP Vivienda in Mexico.

FBR Chief Financial Officer, Aidan Flynn says, "The beauty of FBR's system is that it's end-to-end. A builder can simply email us the house plans, and our Hadrian X® robot will supply and lay all the bricks on the construction site to digital construction precision standards. And best of all, we are aiming to be able to do it in a single day."

"Time is critical for all start-ups. R&D financing lets you access your R&D tax refund early, so you can reinvest and get your product to market faster." Building a bridge to a capital raise

After its initial successes, FBR found itself in a catch–22 situation. It needed to raise more capital to continue scaling up. But optimising the timing and method of this funding round was important for FBR to stay focussed, on track and avoid becoming too diluted. Behind the scenes, FBR was working on crucial research to increase the bricklaying speed of Hadrian X®, as well as several software and hardware improvements. The FBR team knew if they could complete this research and prove their technology further, their next crucial funding round would be more successful.

So FBR started to search for solutions to this dilemma and soon identified R&D financing as the way ahead. "A Radium Advance was a quick and easy way to get cash in the door and avoid the distraction of having to raise capital at a critical time," Aidan explains.

In addition to enabling FBR to focus on pushing forward with its R&D, FBR found other upsides to choosing a Radium Advance. "Radium Capital's online portal makes the process of getting an R&D advance fast, easy and efficient. And it's competitively priced," Aidan says.

Another major benefit of a Radium Advance was that this capital was effectively FBR's own money—its R&D refund— arriving at exactly the right time. This meant the business could achieve its goals of avoiding too much dilutionary equity and ensuring the maximum return from its planned capital raise.

Scaling up to meet Australian and global demand

After navigating the challenges of the COVID-19 pandemic in 2020, the future is bright for FBR. Hadrian X® has successfully constructed two buildings in the real world, which has opened the door to more new markets for FBR. With the business firmly in expansion mode, it's now scaling up to build as many robots as possible for construction projects in Australia and around the world. "The pandemic has shown how important robotic technology can be. Hadrian X® helps maintain social distancing on building sites. It also offers a solution for countries all around the world that can't access the migrant labour they depend on for construction projects," Aidan says.

- Aidan Flynn, Chief Financial Officer, FBR



To learn more about Radium Advances and how they could help you bridge a funding gap in your R&D budget, call us today on 1800 723 486 or visit radiumcapital.com.au