

## ADVANCED MANUFACTURING GROWTH CENTRE

## MEMBER PROFILE



MOVUS was formed in 2015, and is an Indooroopilly, Queensland-based startup that makes 'dumb' machines smarter through a combination of sensors, cloud computing, and machine learning algorithms.

MOVUS likens its FitMachine technology, which uses hockey puck-sized magnetic sensor modules to track temperature, vibration and noise changes, to FitBit. As with 'wearables' genre of products, MOVUS delivers previously-unavailable insights by leveraging sensors made affordable and small through the smartphone industry.

Its technology can be applied to industrial machinery including chillers, pumps and fans, though CEO and co-founder Brad Parsons describes the possibilities as 'unlimited'.

It does away with the ancient practice of routine inspection of assets, through predictive maintenance, providing a warning to machine owners if a problem might be about to emerge.

“**The MOVUS FitMachine service, with its network of small Internet of Things (IoT) sensors installed on machines, provides 24x7 monitoring of machine health. It allows personnel to focus on planned maintenance activities rather than responding to unexpected and sometimes total machine failures that can cause lengthy downtime and lost production,**” Parsons explains.

“**A large proportion of industrial machines today are still manually inspected to detect faults and deterioration that might result in failure, and when combined with routine maintenance to replace worn and faulty parts, this forms the cornerstone of current machinery maintenance practice across the globe.**”

The combination of fleet management and remote monitoring can extend the longevity of machinery while increasing labour productivity.

Each module is produced at the MOVUS's Brisbane site, though the highly serviced manufacturer sells insights rather than its sensor packages. Their machine learning algorithms make sense of changes in machinery performance, and are powered by Amazon Web Services cloud computing. A customer can receive real-time insights provided to them via a simple-to-understand dashboard application.

Customers to date include Unitywater, Wesfarmers Chemicals, and Bombardier Transportation, while Blackbird Ventures, Telstra, and Scott Farquhar's Skip Ventures were among MOVUS's series A investors.

According to Parsons, there are big inroads to be made in using the world's resources better by making machines smarter. Of 2.3 billion machines, cumulatively using 43 per cent of all our energy, only 3 per cent are connected to the internet. His company's small orange packages can connect to the internet within five minutes, and the cloud using the 4G mobile network, and 100 connections are possible per gateway.

The versatility of MOVUS's concept means that its technology is useful in countless situations and industries, and it is “**constantly creating new market opportunities for our service, requiring ongoing research and development and manufacturing activities that are often outside the core expertise,**” says Parsons.

Its relationship with the Advanced Manufacturing Growth Centre is highly useful in this regard.

“**As a developer and manufacturer of 'high tech' products, our membership of the Advanced Manufacturing Growth Centre opens opportunities to interact and collaborate with a wide range of research centres and manufacturers, enabling smaller companies like MOVUS to rapidly exploit these new opportunities,**” concludes Parsons.



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**Brad Parsons**, CEO