between the lines NZ Product Accelerator

## Product Accelerator is a MBIE funded programme

Pushing back the frontiers ..

### Partnership Putting 3D Printers into Primary Schools Gaining Momentum

A partnership between the Rotary Club of Newmarket and the Product Accelerator to put 3D printers into primary schools is gaining momentum. To date 5 printers have been given to mainly low decile primary schools.

MakerBot Industries in the US was the seed for the Rotary Club of Newmarket's initiative to put 3D printers into schools. MakerBot have a goal of partnering with the community to put a 3D printer into every school in the US. Newmarket Rotary Past President and Business Development Manager of the NZ Product Accelerator Brian McMath suggested to MakerBot that his club would be an ideal partner for this in NZ. The result was MakerBot gave the club a 3D printer to kick start the project.



The printer was commissioned by staff at the NZ Product Accelerator; a Government funded initiative to transform companies through innovation. "The Product Accelerator has pulled together all 3D printing capability in its partner universities and increasing awareness of this technology is one of its goals," said Professor Mark Taylor, Director of the programme, "so this partnership with Newmarket Rotary was an ideal fit. The Product Accelerator is commissioning the printers for the schools and having a printer in the office has helped our team understand the technology and assist other departments with prototyping so it is a win: win partnership for us" Mark added. Rotary Newmarket, other Rotary Clubs & related Trusts are funding the purchase of the printers.

Newmarket Primary School in Auckland was chosen as the first school to get a 3D printer. Principal Wendy Kofoed is in no doubt that Newmarket Rotary has a new and innovative way to create a link between education and technology and she said, "Without organisations like Rotary, recognising the fact that schools often struggle to keep up with technology, we'd be left behind and so would our students' bright, young minds."

The initiative was launched at a Rotary District 9920 visit to another of our partners, Auckland University of Technology in May. Space was limited to 50 Rotarians and their associated school's technology teachers. The visit was a "hot ticket" item, so a waiting list had to be instituted. Visits were made to the Additive Manufacturing (3D printing) Research Centre, the Scanning Electron Microscope and the Robotics Department.

"The cost of 3D printers has decreased significantly as the technology has developed which makes them very affordable to most Rotary clubs, so our goal is to make this a NZ wide project," says Brian.

# Collaboration gets it done..

# Partnership with SEAT, Massey University on Open Access Lab for Additive Manufacturing



The NZ Product Accelerator's northern most partner is The School of Engineering and Advanced Technology (SEAT), Massey University, at Albany. The Campus has made significant investments in additive manufacturing, materials, and robotics to build a Centre of Additive Manufacturing (AM), one of the Open Labs throughout NZ. Using a combination of automation and modified AM technologies based on fused deposition modelling (FDM), selective laser sintering (SLS), and stereo-lithography (SLA), a wide range of research projects are being addressed, including, printing flexible polymers, developing new and innovative printers, and printing onto complex surfaces using robots.

## **Network Development**

In October the programme hosted a visit from Dr Eric Klemp from DMRC, Paderborn University's Additive Manufacturing, strengthened the AM network around NZ through visits to VUW, TiDA, Massey and AUT laboratories.

A visit by Andy Hamilton, CEO, The Icehouse, cemented the importance of working together on early stage manufacturing company development through mentoring in both the business and manufacturing and product - based skills. Watch this space for the next steps.

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