

# Manufacturing tech hub gives firms cutting edge

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A hub set up just over a year ago to focus on cutting-edge manufacturing technologies, such as 3D printing, has helped companies in areas from dental health to clean water.

Trade and Industry Ministry Permanent Secretary Loh Khum Yean gave a glimpse yesterday into the future of Singapore's manufacturing industry at the opening of a summit on additive manufacturing, as he shared examples of projects that the National Additive Manufacturing Innovation Cluster (Namic) has worked on.

Namic was formed in September 2015 to forge public-private partnerships in order to translate research in additive manufacturing into commercial applications.

Such collaborations are key to future-proofing the local manufacturing industry, Mr Loh said.

"To ensure that Singapore's manufacturing sector remains competitive, we will continue to invest in advanced manufacturing technologies, encourage public-private partnerships and develop our workforce."

Namic oversees Nanyang Technological University's Singapore Centre for 3D Printing, National University of Singapore's 3D Printing Centres at the Schools of Medicine and Engineering, and the Singapore University of Technology and Design's Digital Manufacturing and Design Centre.

Companies can use Namic's equipment and tap its know-how to manufacture products using 3D printing. The firms can then assess if the technology is useful before going on to buy a machine.

Since its inception, Namic has worked on a wide range of projects, engaging more than 380 companies and institutions, including small and medium-sized enterprises and start-ups.

One such start-up is Structo, a 3D-printing dental solutions provider, which has developed industrial-grade 3D printers for various dental applications. Namic worked with Structo on the commercialisation strategy for its patented technology.

Mr Loh also pointed to Nanosun, a start-up using additive manufacturing to develop microfiltration membranes that enable the supply of clean water for emerging economies. Namic partnered Nanosun in pioneering the 3D printing technique to increase the efficiency of its membranes, and supported its scale-up efforts.

Mr Loh noted that the manufacturing industry is evolving, and cited a Gartner report saying that by 2020, 75 per cent of manufacturing operations worldwide will be using 3D-printed tools, jigs and fixtures to produce finished goods.

"It is important to ensure that our manufacturing sector is able to harness advanced technologies like additive manufacturing to raise productivity, create novel products and develop new business models," he said.

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Mr Loh (left) receiving a token of appreciation, a 3D-printed metal globe emblazoned with Namic's logo, from Namic director Ho Chaw Sing at the opening of a summit on additive manufacturing yesterday.  
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