



where ideas take flight



Set up as a strategic design initiative, Design Incubation Centre turns two this year and is already working towards becoming a regional and international leading establishment in industrial product design development. Grace Chan checks out its lab and learns about the facilities that support its research

THE DESIGN INCUBATION CENTRE (DIC) IS A DESIGN RESEARCH LABORATORY whose interests lie within the boundaries of human and social needs. It then further investigates and develops new design tools with emerging technologies to find new possibilities for new design practices in the industry, exploring how they can impact on technology and social trends. Situated as part of the Department of Architecture at the School of Design and Environment in the National University of Singapore, DIC also has its own prototyping facilities, with facilities that support its research.

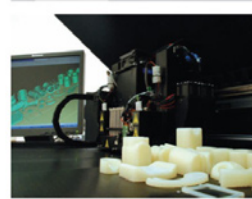
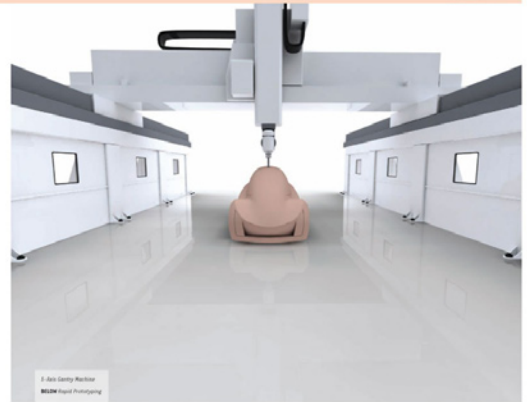
Its design process involves a team of eight multidisciplinary staff: a design director, four industrial designers, one research designer, one strategic analyst, and one prototyping specialist. The team first observes and identifies an area of need in the society, then brainstorms, conceptualises and designs the intended product. The next stage is the prototyping, and evaluation, leading finally to the product implementation.

Besides being a research laboratory, DIC is a commercial entity and trademark of DIC, and steps up as the fabrication arm of the research laboratory. "Its role is to propose new things, find and build the structure, and make it happen," says Francis Chia, Design Director of DIC. Working together spontaneously, DIC helps DIC to communicate its research and advances through commercial distribution channels. Its aims are to experiment and create new possibilities and new relationships between man, object and his environment. And this is achieved through projects that explore the emerging and evolving human needs, technology and social trends.

How does DIC's prototyping lab support its research?
We have prototyping capabilities that help translate virtual concepts to full-scale physical prototypes of up to three metres. Bridging the virtual and physical gaps, the prototyping lab

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hot seat

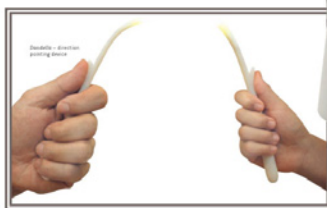


enables us to effectively translate ideas from CAD data to life-size prototypes for testing. This results in faster iterations of prototypes for a more fluid and robust design process. Leveraging on these facilities, we aim to expand our research scope to include investigations into areas of architecture, automation, marine and aerospace.

What else does DIC do?
We also organise workshops and engage current undergraduates in actual design projects. We believe that these efforts will help to grow a pool of bright, young talent to propel our creative industries to greater heights.

How does DIC investigate and develop new design tools to find new possibilities for the practice of design?
They usually stem from the workshops that we organise. An example would be the digital magnifier that was developed based on the Sensibility 4.0 workshop held in February this year. We did an observation study to see how the industry work with technology. Through this we tried to create a better option and give them a better experience. This experience could come in the form of a product, service or a way of doing things. And with the right context we tried to help make this project possible. This is how we normally approach a project and how we really carry it out.

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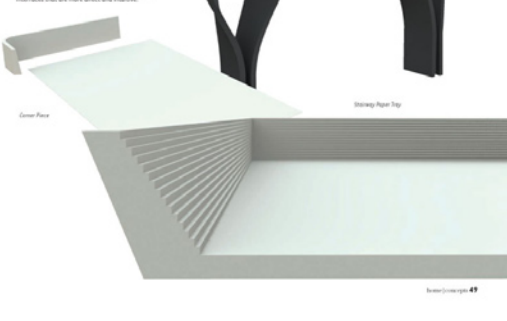
How do you analyse emerging and evolving human needs, technology and social trends?
Well, it doesn't all happen at the same time. New technologies are emerging. Now, between the real world and the virtual world, there might not be a very distinct difference as to how much exists virtually on the network and how they exist in the real world physically. The kinds of product tools they need could be anything for them but has not been tackled. So one of our projects, Robots, is aimed out to create a device that will help create a bridge between man and the new emergence. But of course everything that we do must connect to the needs of mankind directly. Human needs are ever-changing and evolving. However, after having said that, sometimes they stay the same and at the same time are also different. Here at DIC, we're always trying to match these three areas between with new technologies you can create new possibilities. You can't create a standard or service on its own. It has to be supported by a whole ecosystem. That's why Apple (Microsoft) is successful because it's able to do just that. The beauty of Apple is that its technologies are also able to connect to its ability to do everything together.

How does the digital magnifier work?
It basically provides a direct interface between the user and technology by having a single function—enlarging information (both text and graphics) shown on the screen like a traditional magnifying glass. It connects directly to the computer via USB. The

software activated enlarges the portion of the screen where the digital magnifier scans, offering enlargements with a sharper resolution than a traditional magnifying glass.

This tool seems redundant as the computer itself already has a magnifying function.
When we have computers that are so sophisticated, it may seem redundant to have this tool performing just a simple function. However, because the digital magnifier is shaped and behaves like the traditional magnifier that we're familiar with, we intuitively know how to use it even when in the digital world. It helps also ease the complexity we associate with when using technology.

It was said that DIC received the first win at the International Design Competition Under 35,000, bagging a Gold and leading 424 entries with their design, the Doublet. Tell us more.
Drawing inspiration from our daily behaviour, Doublet provides an intuitive way to navigate, indicating the direction by 'pointing' to the right way. The device works with GPS-enabled mobile phones to track physical location. It empowers our research interest in simplifying technology, replacing complicated digital interfaces with possible physical interfaces that are more direct and intuitive.



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A family of three-legged lamps

Whatever design that has been done must have a sense of appropriateness, depending on the context itself. At the same time, it must also resonate – Patrick Chia, Design Director, DIC

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A family of three-legged lamps

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