GOING BY DESIGN

User-centric design sets a product apart from its competitors and helps a brand stand out BY LEILA LAI



N A COMPETITIVE market, good design sets a product apart from its competitors, from the way that it solves a problem to the quality of user experience that it provides. Similarly, a company that applies user-centric design to other aspects of its business increases its competitiveness by creating better experiences for both customers and staff – and improved competitiveness is one reason that Singapore has been encouraging local enterprises to adopt such an approach to business.

Design thinking, as it is often called, is based on the idea that design should be user-centric. It involves creating products and services that appeal to users through an iterative process. In other words, companies must put customers first, try to understand their needs and where the opportunities lie in meeting those needs, and obtain feedback from users to improve the innovations.

It sounds like common sense, but few companies actually operate this way, says Mark Wee, executive director of DesignSingapore Council (DSg). "A lot of businesses won't talk to their customers," he says. "They put out what they think (the customers) will like, or the companies are set up such that the departments are in silos and don't really think about how they can serve an experience."

Indeed, a 2018 McKinsey report titled *The Business Value of Design* found that among 300 publicly listed companies studied for their design activities, "only around 50 per cent of the companies we surveyed conducted user research before generating their first design ideas or specifications".

Examining the tangible business impact of design thinking quickly reveals its importance. According to the McKinsey report, companies that prioritised user-centric design across departments significantly outperformed competitors on growth in revenue and total returns to shareholders over a five-year period. A longitudinal study of Singapore companies, commissioned by DSg and published in February 2019, found that companies that invested more in design in 2016 than they did in 2014 had two times higher returns than companies that reduced design investments over the same period to save costs.

Anna Lim, executive director of soup restaurant chain The Soup Spoon, a company that has been using design thinking since 2012, says: "(Design thinking) has to make dollars and cents. It will uplift the company in terms of brand image, sales, bottom line and improved revenue. When people look into designing their processes, making it better for customers, you get better customer experience or are able to serve more customers at a time. All this will lead to better revenue."

She added: "Why do we do promotions? It's to have uplift in sales. So how do you design the promotion to better reach the customers? Design thinking is infiltrating all our lives, and businesses should embrace it."

Other factors such as ever-increasing competition provide compelling reasons to embrace design thinking, Mr Wee says. "Everyone knows that in an increasingly competitive environment, you either cut bottom line or create new value. Design is about creating new value. And now there's a push for us to all go overseas. Then your market is a global market, and you really have to create new value."

In addition, the rate of change in the business environment today means that companies must adapt quickly or lose out. According to an oft-quoted finding by Yale University professor Richard Foster, the average life expectancy of S&P 500 companies has fallen from 67 years in the 1920s to 15 years in 2012, illustrating the need to innovate for growth and survival.

PRODUCTIVITY GAINS

Small and medium-sized enterprises (SMEs) that have adopted design thinking told *The SME Magazine* that they have enjoyed productivity gains through streamlined processes and actual revenue growth through successful product innovation. One company even launched a new business arm, setting up a startup incubator focused on food innovation.

"It's about changing the mindset of the people in the organisation to focus on the consumer," says John Cheng, director of trading and business development at Cheng Yew Heng Candy Factory. "Design thinking is really about the consumer at the end of the day, trying to understand how they will use your product and how it will benefit them."

Examining its customer experience, the sugar manufacturer realised that because younger consumers do not cook at home as older consumers did, no amount of tradition or even different marketing strategies would get the younger generation to purchase the traditional rock sugar products that

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have been Cheng Yew Heng's main revenue source for more than 50 years. It needed to come up with a new product that would appeal to a new customer base. Employees helped to think up personas of potential new customers, and the company got people who fit these personas to try prototypes of sugar products, before settling on its Jewel Rock Sugar Sticks. The sugar sticks can be eaten like a candy or stirred into a drink, making it appealing to different consumer groups.

Cheng Yew Heng also applied design thinking to improve its packing process, focusing on a step where workers had to select pieces of sugar by hand to create an appropriate mix, because the pieces were delicate and not uniform. Off-the-shelf automated sorting machines would drop the pieces from height, damaging them, and so the company had to work with the Agency for Science, Technology and Research and the Institute of Technical Education to customise equipment based on the needs of both the business and the workers.

Noting that Cheng Yew Heng's annual revenue roughly doubled to S\$100 million after the company adopted design thinking, Mr Cheng says: "Using design thinking is not just about a product. It's an entire process where you reinvent your business to develop interesting products, services and processes. If you differentiate from your competitors, you can capture a bigger market."

By understanding users better, companies can also get a better idea of what capabilities they already have to meet needs beyond their usual areas of focus. For example, Cheng Yew Heng leveraged its expertise in commercialising food products to set up a food incubator in 2017, helping startups take their innovations to market.

Another local enterprise, Teo Garments, used its apparel manufacturing capabilities to expand into its own children's apparel line under a new





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brand, Oeteo. Under this brand, it designed a baby romper without zippers or snap buttons, which is easier to put onto wriggling babies. Says Wilson Teo, the second-generation business owner of Teo Garments and Oeteo's managing director: "(Design thinking) helped us get clarity on the purpose of the business and have a better understanding of our own capabilities and strengths. From there, it was then useful for us to understand what are the opportunities out there that we should be focusing our resources on."

Design thinking also helped Oeteo to structure the product development process. "Because the brand was new, when designing the product, we were all over the place," shares Mr Teo. "It was quite a waste of resources, going back and forth, but applying design thinking made it a more purposeful and structured method that we followed."

This approach to innovation can and should be adopted by everyone in the company, so that it can be used within and across various departments. Soup Spoon's Ms Lim gives the example of a marketing campaign targeted at students: the marketing team could work with the hiring department to design a flier that serves as both a student meal promotion advertisement and recruitment notice, attracting potential new hirees to the company.

CHANGE IS AFOOT

Design thinking is gaining traction among Singapore enterprises - while DSg does not have exact figures on the level of design adoption among companies here, a design spend and adoption study that it commissioned earlier this year found that 5,000 companies are looking to adopt design thinking over the next three years.

DSg also surveyed about 650 companies and outlined in the Skills Framework for Design 25 job roles where companies are hiring people who can combine design skills with business, innovation and technology.

"Designers are now being asked to have transdisciplinary skills to

connect the dots to business and marketing. The companies want more strategic thinkers. Other needed competencies are communication, being able to articulate the concepts better and sell it to the senior management," Mr Wee says.

To meet the need for design professionals with more transdisciplinary skills, the Singapore government commissioned a Design Education Review Committee (DERC) to work on updating the design education curriculum for students and professionals. The Ministry of Trade and Industry has accepted the DERC's five recommendations, unveiled in June, which include teaching design thinking skills to students across more disciplines, enhancing continuing education and training programmes and incentives for design educators and professionals and creating modular courses and learning communities to teach the public more about design.

These changes will directly benefit SMEs, says Mr Wee: "These are the skills that designers and non-designers need in this evolving workforce. And SMEs need people who are like a Swiss army knife who can do a bunch of things, because they are so small." He adds: "Even for non-designers, there's a need for them to be equipped with more design methods and tools to drive innovation in the workplace. This is because a lot of these product and innovation teams are multidisciplinary, with a designer working with someone from marketing and someone from business. They must work together to see what is feasible business-wise, or desirable, and create a new product or service to address that." ■

SUGAR COATED

Mr Cheng says that Chena Yew Heng Candy Factory came up with lewel Rock Sugar Sticks as a new product that would appeal to a new customer base



HOW TO GET STARTED WITH DESIGN **THINKING**

COMPANIES looking to incorporate design thinking into their businesses can seek advice from DesignSingapore Council (DSg) to be directed to suitable resources. DSg is currently working with large local enterprises to develop better customer experiences through design, and plans to roll out design thinking schemes for SMEs in the retail,

hospitality and food-related industries within this year.

A series of DSg workshops got The Soup Spoon founder Anna Lim and her team started on their design thinking journey in 2012, and they found the concept so useful that they later engaged external design consultants to develop a concrete plan to make the company a global brand.

The Soup Spoon has been gradually implementing parts of the blueprint, which encompasses all four pillars of its business (products, space, communications and people), but has fine-tuned it along the way. This is especially important since disruption is constantly happening, says Ms Lim, and a 10-year plan can rapidly become outdated without tweaks.

"Structure empowers creativity," she says. "The framework and methodology allows us to work within the structure that we have, and come up with new ideas on how to improve things and what to do next."

For example, prototyping, a key part of the design

thinking approach, helps the Soup Spoon team test and compare the benefits of various products and processes. When the ordering process needed to be revamped, they created a cardboard replica of the store in a design studio and timed different versions of the process. They then combined the data with feedback on how each version made the customers feel before settling on one that was later implemented in stores.

The process may change again in future, because of business conditions such as manpower tightening, but Ms Lim says that having a structured method for solving the problem will make it easier to handle. "We can't fully launch everything, because you need a lot of money and resources (for that). You learn the good and bad points from a prototype – can we scale it down so that it's not so elaborate and intensive? Do customers actually care about it being so elaborate? Design thinking is about prototyping and making sure the concept really works, tweaking it and



understanding the customer's journey and engagement."

Researchers at management consultancy McKinsey advise starting small and getting four key areas of design thinking right in a single project, rather than attempting a complete overhaul of the business. These areas are clusters of design actions that correlated the most with improved financial performance in an October 2018 study titled The Business Value of Design, which McKinsey used to form the McKinsey Design Index (MDI). They are:

- Measuring and driving design performance with the same rigour as revenues and costs
- Breaking down internal walls between physical, digital and service design
- Making user-centric design everyone's responsibility • De-risking development by continually listening, testing and iterating with end-users.
- "Through interviews and our experience working with companies to transform their strength in design, we've

also discovered that one of the most powerful first steps is to select an important upcoming product or service and make a commitment to using it as a pilot for getting the four elements right," McKinsey said. "This approach showed far better financial results than trying to improve design as a theme across the whole company - for example, conducting trials of cross-functional work in isolation from real products or services."

While the report notes that excellence in all four dimensions for a company to score in the top quartile of the MDI is relatively rare, "companies that tackle these four priorities boost their odds of becoming more creative organisations that consistently design great products

"For companies that make it into the top quartile of MDI scorers, the prizes are as rich as doubling their revenue growth and shareholder returns over those of their industry counterparts," it concluded. ■

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