

## COVER STORY



*"You've got to start with the customer experience and work back toward the technology - not the other way around"*

*Steve Jobs*

**T**his quote by the iconic Steve Jobs describes in one single line, what the power of design thinking can do to the fortunes of a company. Apple has always kept one thing in mind while designing all its products (from the iMac to the iPhone to the Apple Watch) - a relentless focus on customer experience by creating products



TEST



PROTOTYPE



IDEA



DEFINE



EMPATHIZE

Design thinking is broadly defined as a customer centric approach to design products, services and solve problems. CIOs can apply this concept to position themselves to be always in a state of readiness and be proactive to market demand. Many organisations have used this concept to its full potential. **Abhishek Raval** presents how Design thinking can completely change the way CIOs look at business issues



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**Anil Sondur**  
Executive VP, Tata Elxsi



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**Theodore Forbath**  
VP, Digital Transformation, Cognizant

problems. M&M, SAP, GE and many other MNCs have also been using this innovation tool.

With the flux that the technology world is going through and with all the brick and mortar firms also starting to get a digital address, the design thinking process can be leveraged by the CIO in taking up the flood of challenges, which is a direct import from the breakneck developments in the consumer technology space. Recently, the industry has seen a surge in interest from firms to follow this innovation style. "Over the past six months there has been a massive increase in the level of interest in design thinking from CIOs and other CXOs globally. CIOs are opening up to this idea," says Frederic Giron, VP, Research Director serving CIOs, Forrester.

"We have had a few conversations with CIOs regarding Design Thinking," says Jaideep Mehta, MD, India and South Asia, IDC

### What is Design Thinking?

Before delving into how CIOs can apply Design Thinking, it is necessary to get the concept and the definition right. Out of all the industry players that Express Computer spoke to, the most prevalent was 'keeping the end user at the centre of the initiative for which design thinking is used'. Agrees Gopichand Katragadda, Group CTO, Tata Sons, says, "A critical aspect of design thinking process is to have a user experience center with mechanisms to observe and obtain live feedback from future users of the products & services. Customer Centricity, hence, is the key driving force." For a CIO, some examples include, observing internal customers via cameras, mouse clicks, and keyboard usage when asked to use a potential new application.

Design thinking further emphasizes end-user observation in a controlled environment with frequent touch points. "CIOs can consider building a basic user experience center with simple technology elements and small space. They will also have to hire the right kind of talent to translate the observations into products and services," he says.

Parthasarathy V S, Group CFO and CIO, M&M says, "Design Thinking is a

process of co-creating along with the customer. It is a unique problem solving experience that you bring to your customers, both external and internal, and in turn create value for them. It starts with identifying customer needs and entails providing a creative resolution of concerns and creating solutions, with the intent of giving an enhanced experience."

Parthasarathy believes that Design Thinking will bring about a change in the mindset of the CIO. "The empathetic approach of design thinking will help them evolve from their traditional roles of problem solvers to creative solution providers. They need to think critically and find creative solutions to problems while having a strategic mindset. This changed approach will shift them from accidentally discovering value to systematically creating value. For example, we have moved from business process re-engineering to new business models. Now it's the business moment that every business has to think about and how a consortium of businesses will come together to create a life time experience for the customer and participate in every 'business moment' and grow the business exponentially."

Design thinking is a discipline, which actually originated in the field of architecture. "The same principles were used by the Stanford university and they converted it into business process oriented thinking to apply the principles in creative thinking and the use of techniques like brainstorming, free-wheeling thinking and whiteboarding to quickly come up with solutions," says Jaideep Mehta of IDC.

A few definitions also combine the customer centricity aspect with agile development methodologies. "The idea of design thinking is to keep the user at the centre of the entire project. That's where we see companies trying to merge design thinking with agile development. In order to combine these different concepts, these companies have an iterative development process where they come back very often to their user and test the prototypes of the product they are developing in order to ensure the product is in the direction of where the user would





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like the product to be. The final product has to be relevant to the desires of the users," explains Giron.

CIOs leverage agile development in their organisations. "Agile development already includes elements of design thinking like frequent end-user feedback. Design thinking further emphasizes end-user observation in a controlled environment with frequent touch points," states Katragadda.

Taking an iterative approach is important. The solution has to be perfected, iteratively with observations and inputs gathered from end-users. "Many CIOs have implemented agile methodologies that cover the iterative aspect," finds Theodore Forbath, VP, Digital Transformation, Cognizant.

But then the customer focus has always been prevalent. What new things does Design Thinking bring to the table? As Tim Brown from IDEO, a California based consulting firm, says in his recent

blog, "Empathy is not only about sympathy for someone else's circumstances, but the deep intuition for what it feels like to live their lives. If you manage a store, for example, try ringing up customers at the checkout. If you run a logistics center, try working on the warehouse floor. If you manage project teams, sign up to be a regular project team member for a day. Whatever it might be, go experience the day of someone you lead."

#### Importance of the human element and collaboration

This is where the IT function has missed the point. The human element. There is a lack of focus in understanding the true desires and requirements of the users (both consumers and employees).

The business process, IT systems are designed to fulfill the business requirement but the users of the system are not taken into consideration to the



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**Gopichand Katragadda**  
Group CTO, Tata Sons





Design Thinking helps us arrest problems before they occur

**Parag Arora**  
Area VP & Country Head, India Subcontinent, Citrix



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Group CFO, CIO, Mahindra & Mahindra

extent to which they should be. Also quite often, the systems are bought without any collaborative effort with the end users of the platform. Giron says that design thinking can correct basic flaws and make them correct. Says he, "CIOs should focus more on the users and understand how do they do their jobs, rather than on the hardware to be bought. When you look into the design methods, one of the key characteristics is combination of viability, feasibility and desirability. Viability is the business model -- it's the economics of the project. Feasibility is the technology part, and the desirability is from a user perspective on how he will use a particular innovation or a solution." The magic happens at the intersection of the three.

On the customer support side, there is a lot of work going on currently in giving a consistent experience to the customer queries -- be it online, on the phone or any other communication channel.

Infosys has infused Design Thinking with great depth inside the organisation. Sanjay Rajagopalan -- Senior VP, Head -- Design & Research, Infosys says, "Design thinking puts the focus on empathetic, human-centered, problem finding. The solutions are further arrived upon by the techniques of rapid, iterative prototyping, testing and solution finding." By training over 70,000 employees in this methodology, the company has undertaken what is possibly the world's largest such employee enablement effort. As a result, Design Thinking is used effectively as an innovation framework internally (e.g. In HR, IT, Marketing, Procurement, Client Communication etc), in the company's ongoing client projects (i.e. The Zero Distance Initiative), and in jump-starting new projects for clients (i.e. The AiKiDo Initiative).

Design thinking can be used very effectively in the PoC stage. PoCs, otherwise are carried out like a compliance process, and the mindset is to wrap it up after checking a few features. Parag Arora, Area VP & Country Head, India Sub-continent, Citrix Systems says, "At Citrix, by applying the design thinking, we along with the CIO team, take a comprehensive approach and also engage the users in a big way. They are

profiled in terms of their different requirements and the PoCs are planned keeping in mind how those requirements will be fulfilled in a full fledged roll out. This helps us to arrest the problems much before they occur. To not involve the final consumers of the product would be flawed thinking."

Anil Sondur -- Executive Vice President, Tata Elxsi, feels that it's the 'dissemination of information', where most of the CIOs fail. "IT tools are most of the times underestimated, especially in-house. Not everybody is aware about the tools available for use inside the organisation."

### Design Thinking in action

Tata Elxsi applies Design Thinking in the areas of Information Design, where the focus is to share information, make tools available to the employees, so they can use them.

Mahindra & Mahindra also follows a similar approach. The company has attempted to scale Design Thinking across the workforce to help them collaborate better, focus on discovery and exploration to uncover customer needs that have not been articulated with relevance to emerging technologies, business models and emerging human behavior.

Cognizant has been organising design thinking sessions for its employees four about four years now. "Some of our executives have been directly trained by Stanford d.School (Institute of Design at Stanford) on the design thinking approach and process. Over the years, we have learnt a lot about applying design thinking in our context," informs Forbath from Cognizant.

The company has dozens of innovation trainers who conduct design thinking sessions. A good number of engineers and developers from across functions have been trained on innovation, which encompasses many aspects of design thinking. Several hundred of these resources have received specialized training to bring deeper understanding about the subject.

Design thinking is also strongly entrenched at Citrix, so much so that they follow a top down approach for





fixing the communication guideline on how the the internal and external stakeholders will engage with customers -- be it the company's internal consulting, sales, pre-sales staff or external stakeholders. "Every year, Citrix's CEO, Mark Templeton gives a guideline on customer engagement. Employees are trained in this communication approach, wherein the messaging should not be inconsistent when the potential customers interact with the employees of Citrix irrespective of which function they belong to," says Parag Arora. "On the customer support side, there is a lot of work going on currently in giving a consistent experience to the customer queries, be it online, on the phone or any other communication channel."

It's said, Happy Employees = Happy Customers. Design thinking is also being used to establish and evolve systems on which employees can perform jobs with speed, ease and accuracy. Take a function like sales, where the design thinking approach can be used to deliver phenomenal results. "There is also a lot of work that CIOs are doing in the CRM systems to enhance the performance of the sales personnel. The reports in the system are being studied to understand

the behaviour of the sales staff and design it to exactly fit their requirements," says Giron from Forrester.

A large consumer packaged goods (CPG) company using design thinking studied the failure on it's massive investment in procurement systems going to drain due to low usage by its employees. They are now in a process of re-doing the platform. "A portal is being set-up on top of the procurement system that will make it easier for the requesters to do their jobs," Says Giron.

From an IT agenda perspective, it helps the CIOs understand how employees are doing their jobs and how could the solution be designed in such a way that it's easily usable. This requires the CIO to think about an easy to use UI that provides a good user experience.

Indian companies are still beginning to evolve with the idea of design thinking. For it to be established and ingrained in the organisation culture will be crucial because innovation is a constant exercise and when it doesn't click, chances are that it is dumped. In the age of digitisation, it will be all the more crucial to adopt this way of thinking.

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