Executive Summary

Design thinking (DT), a customer-centric approach for integrating end customers in the innovation process, enables organizations to identify customers’ real needs. The full article describes the evolution of DT in Deutsche Bank's IT division and its role in solving specific problems, better integrating the business and IT divisions, and bringing the bank's IT closer to its customers, and identifies the lessons learned.

A key aspect of customer-centricity is that end customers are continuously integrated into the organization's innovation process in a way that deepens the company's knowledge about their contexts, needs and motivations. The DT cycle systematically involves a potential customer in the iterative needs-discovery process.

Steps in the Design Thinking Cycle

The first step of the DT cycle focuses on defining (or re-defining) a “wicked” (difficult-to-solve) problem or a situation where the company feels it lacks customer-centricity. The needfinding step focuses on potential customers’ issues and needs related to the problem through observations and interviews. The brainstorming step then generates a large number of ideas for several needs. Instead of discussing these ideas out of context, they are prototyped in a tangible way so they can be directly tested by end customers. This tangibility provides immediate feedback from (future) end customers, which often helps revise assumptions about customers’ needs and the initial problem. The cycle is repeated to create successive prototypes that provide deeper insights into the solutions that need to be built to ideally address the identified customer needs. This rapid prototyping cycle not only helps test ideas concretely, it also helps the company understand its customers’ future needs and to put the customer continuously at the center of its efforts.

The Sequence of Tangible Prototypes Follows a Milestone-Oriented Project Structure

Exploring the problem design space runs concurrently with the other milestones. The first milestone extracts critical functions from the problem space that will need to be integrated in the ultimate solution. At the dark horse (visionary) milestone, previous assumptions are challenged to explore unlikely-to-succeed ideas, but will provide a relatively large performance payoff if they succeed. The funky (integrated) milestone is where the most successful elements from the previous milestones are connected; this milestone includes roughly connected concepts. The functional milestone provides the first concrete preview of the ultimate solution that integrates working functionalities. The next milestone is where one key functionality, “x,” is completed. The final prototype milestone delivers the solution for one/several key identified needs and the experience of using the real product (even before development of the production solution starts).

1 The full article is published in the March 2016 issue of MIS Quarterly Executive, available online at www.misqe.org.
How Deutsche Bank’s IT Division Used Design Thinking to Achieve Customer Proximity

Evolution of Design Thinking Within Deutsche Bank

Several roles were involved in the evolution of DT. At the core of the DT organizational structure was the multidisciplinary DT team, which comprised three to four people (initially there was one team but later there were up to three). This team applied the DT methodology to relevant strategic challenges to create a final prototype. The other bridgehead, sponsor, professional coaches, innovation community and method coaches roles are described in the full report.

The evolution of design thinking practices at Deutsche Bank spanned six years. The key to success was to start with small projects and small teams, and then constantly grow the adoption of DT. The evolution had three phases: Learning, Adapting and Diffusing. In the Learning phase, DT was mostly observed by members of the innovation community. As they saw results, they started to adapt and practice their own ways of using the DT approach, step by step (Adapting). They then started to diffuse these practices into the work culture, spreading awareness of customer-centric solutions (Diffusing).

In Phase 1 (Learning), Deutsche Bank tried out the DT approach to see if it could add value for the future. The IT division hired interns for the first DT project, none of whom had previously worked in the banking industry. During this phase, the DT project structure was isolated completely from other IT projects, with DT projects focusing on singular end customer touch points related only to those projects.

The speed of development of the first DT project (11 months from initial idea to market launch) attracted other business sponsors of new challenges for the Adapting phase. The focus in this phase was on adapting the structural and educational aspects of DT. The approach was simplified to single elements, such as single tools (e.g., rapid prototyping) and single project phases (e.g., one critical function and dark horse prototyping).

The focus of the Diffusing phase was on moving beyond DT projects and the IT department. The DT teams became contact points for problems that had never been solved. Thus DT evolved to become a core methodology. Organizational capabilities were deepened to use DT in a multitude of ways, including as a greenfield approach to gain new insights, or as a way of minimizing risks in an ongoing project. And a standard DT “toolbox” was developed as part of an internal DT education program.

Lessons Learned

1. Create an Enabling Organizational Structure. Sustainably embedding DT within a corporate environment requires an enabling organizational structure, the heart of which is an independent operational unit, that cuts across the existing silo structure and thus creates a “safe zone” that enables the first steps of applying DT.

2. Provide Design Thinking Education. Following an evolutionary path for embedding design thinking requires a mix of educational programs. DT is not just a set of principles; it also requires a certain mindset that is acquired by project-based training and experiences overseen by coaches who have previously acquired this mindset. The DT mindset must be fostered from the very early stages of implementing DT practices.

3. Strategically Position Design Thinking Team Members. Strategically positioning people is crucial to overcome the walls between DT teams and IT development teams. Key insights gained from DT prototypes will be lost at the development stage if no one from the DT team works with the IT team to supervise the development of the production-ready product. Alternatively, a former DT team member can become a fully integrated member of the IT development team.

4. Use Prototyping as a Key Tool. Deutsche Bank found that physical prototypes are the best way of communicating the successes of DT. A rudimentary, tangible prototype is sufficient to engage top-level managers and get them thinking about further usage scenarios.

5. Take an Evolutionary Approach to Building a Design Thinking Culture. The key to overcoming the in-built inertia associated with building a DT culture is to start with small projects and small teams. An evolutionary approach to culture change needs resources that allow the work to continue over a long time.

In summary, the case study of how Deutsche Bank faced the challenges of adopting the DT approach in its IT division provides insights into an evolutionary path for embedding this approach in IT operations. Deutsche Bank began its DT journey with a kernel of DT expertise provided by external method experts. These method coaches trained a small DT team, which then began to deliver successful DT projects. People from the DT team were then moved into the IT division, where they developed their own internal education program. The case not only offers important learnings for CIOs and IT directors, but also for other business leaders who are striving to achieve customer proximity in their innovation processes.