TechInsight

Design Thinking and Innovation at VA

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Introduction

In Design a Better Business, design is defined as "a disciplined approach to searching, identifying, and capturing value." The key to design and tools is iteration. Designers move through a continuous and iterative approach as they observe the world, create and validate options, and execute the best solution. Design is about embracing uncertainty, focusing on solutions, and preparing via prototyping. In this document, we provide a recap of a previous *Tech Insight* on design thinking - an overview, benefits, and dive into the Department of Veterans Affairs (VA) new Innovator's Network.

Overview of Design Thinking

According to a Harvard Business Review article, design thinking is a set of principles used as an approach for developing an open and flexible culture. These principles include empathy for users, discipline in prototyping, and tolerance for failure. Design thinking refers to "a process from which design concepts emerge," encompassing cognitive and practical activities such as problem-solving, decision-making, creativity, sketching, prototyping, and evaluating. This process heavily revolves around developing an understanding of the client or user – it is solution focused thinking.

Unlike analytical thinking, design thinking incorporates ideas with few limits to help reduce fear of failure for participants and encourage input and participation from a wide variety of sources in ideation phases.

The Process of Design Thinking

While there are many approaches that define the process of design thinking, the forefront for applying and teaching design thinking can come from Hasso Plattner Institute of Design at Stanford, also known as the "d.school." The five phases of design thinking include: **empathize** (with your users); **define** (your users' needs, their problem, and your insights); **ideate** (by challenging assumptions and creating ideas for innovative solutions); **prototype** (to start creating solutions); and **test** (solutions). According to the Interaction Design Foundation, it is important to note that phases (however presented) are not always sequential and do not have to follow specific order. They may also occur in parallel and iteratively repeat. View the process as one in which different phases contribute to an innovative project, rather than a step-by-step process you need to follow for success.

To better understand the process of design thinking, you might say this is a process of thinking "outside the box." Humans may naturally develop patterns for thinking, such as repetitive activities and commonly accessed knowledge, to quickly apply to same actions and familiar situations. However, these schemas prevent us from innovative problem-solving and may lessen creative results that we could have developed through new ways of seeing and understanding a project.

Benefits to Businesses

Designing thinking is incredibly relevant in today's fast-changing world, especially for large corporations to stay afloat. However, the process of design thinking stays effective only when it's understood and mastered, which does take time. If organizations incorporate design thinking into their work culture, it can help them thrive because focus stays on *the customer*.

According to a 2015 interview with PepsiCo's CEO, Indra Nooyi, design thinking is now driving innovation in the company. Nooyi says that to have a sustainable competitive advantage, you must reinvent every two to three years, as opposed to an earlier period of eight to ten years. Design thinking can help accelerate the process to build new products, fail, and learn faster. At Amazon, executives are required to call in and visit call centers to listen to customer needs and feedback firsthand – a great example of how everyone, including leadership, is responsible for understanding customer needs and problems in order to solve problems. In another example, Deutsche Bank required its employees to use the products that its customers use, to help them understand the customer experience.

One of the greatest benefits of design thinking is that it provides businesses and its employees with the opportunity to constantly learn and evolve. Additionally, it gives employees a new way of telling their stories, sharing their unique perspectives and ideas, and in turn, providing a range of new solutions. If businesses take advantage of this approach and change their cultures to implement design thinking, firms can better understand the needs of their customers; the inevitable result is more success stories.

"Understanding the customer is everyone's job, keeping empathy as central to the organization, designing in real time, and being able to act quickly are the main pieces of the design-driven culture," writes Anubhav Bhatia in *What is Design Thinking and How Can Businesses Benefit from It*.

Designing Thinking and Innovation at VA

In the previous Tech Insight: Design Thinking, we discussed how VA's Center for Innovation (VACI) released a Human-Centered Design (HCD) Toolkit, a guide for VA and other Federal employees to implement a Veteran-centric methodology. As a part of design thinking, HCD is a process for problem-solving that focuses on human needs and takes an innovative and repetitive approach to finding new solutions. VACI's Toolkit aimed to put people at the heart of VA's innovation efforts, focusing on gaining a deeper understanding of customers by being open-minded, collaborative, and adaptive.

Earlier this year, VACI introduced the Veterans Health Administration (VHA) Innovator's Network to create a place for VA to develop new ideas in collaboration with Veteran communities. With innovation at the forefront of all VA healthcare, the largest integrated healthcare system in the country, VA is in a unique position to advance and change the way America delivers wellness programs. The agency has a long history of medical research; its employees have developed the nicotine patch and invented the cardiac pacemaker, to name a few innovations. Although the perception of VA may be covered in rules and "red tape," innovation is very much at work across the Department, and according to recent articles, it is thriving.

Among the innovative developments across VA is the work accomplished by Pamela Bellino, a patient safety manager at the VA Boston Healthcare System, who is making intranasal naloxone, a drug that reverses opioid overdoses, easily accessible in hospitals. Then there's Dr. Beth Ripley, VA Puget Sound Radiologist, who's uncovering new uses for 3D printing to help surgeons better prepare and plan for major procedures. Finally, Thor Ringler, a writer and editor for VA Medical Center in Madison, Wisconsin, who is interviewing Veterans about their lives to summarize and include their stories in Veterans' medical records, which according to doctors and nurses, helps them take better care of their patients.

At the recent VHA multi-day innovation experience in Washington, these employees, along with about 85 front-line VHA staff members, presented ideas at the event. Though not all ideas will be used or receive funding right away, the Department saw innovative programs like this to be a great opportunity to prove that "every VA employee is an innovator." "We are changing the narrative here at VA, and that's hugely important," Carolyn Clancy, VHA's Deputy Undersecretary for Health for Discovery, Education, and Affiliate Networks, said at the agency's innovation experience event. "We're tackling the difficulties of building this innovation culture in our health system head-on," she said. "What we're doing is effective, and it works."

Conclusion

Through the VHA Innovators Network, staff at 32 VA sites across the country help employees submit their ideas and receive funding for design, developing, testing, and spreading concepts for their ideas in design thinking. "In private sector healthcare, it takes about 13 years on average to take an idea from mere thought to reality," said Toby Cosgrove, former President and CEO of the Cleveland Clinic. So far, the VHA diffusion program has worked with 3,198 VHA employees to replicate 344 practices, which has resulted in savings worth about $22.6 million.

According to Clancy, the VHA's Innovation Network came at a good time because it gave employees an opportunity to share their ideas and a channel to make those ideas a reality. Now, 85 front-line VHA staff are design thinking and pitching innovations, bringing ideas to life through what can sometimes be thought of as a complacent, frustrating large healthcare system.

Through design thinking and innovative problem-solving, VA employees can transform the way our Department, and other Federal agencies, develop products, services, and processes, but more importantly, create successful, advanced solutions for serving our nation's Veterans.

Tech Insight Series

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