## **Human Centered Design - Why Does It Matter?**

We are entering an age of convergence, in which industry boundaries are blurring between healthcare, automotive and consumer technologies, products and services. Business challenges are rife with complexities such as new unexpected competitors. increased compliance and customers who have higher expectations and less loyalty.

Designing strategies to be more competitive and responsive to consumer expectations is becoming the hallmark of the most successful companies. Look around and you will see that everything - from the products we use, to the services we employ and the experiences we enjoy - has been designed. But not always has it been designed with the full human experience in mind. A growing trend is employing "human-centered design" into innovation and strategies to build winning products, services and companies.

Simply stated, Human-Centered Design is an approach that places people at the center of the development of products and services to improve business outcomes and create desirable experiences. It is a method to humanize technology and interactions by deeply understanding how and why all stakeholders engage in a meaningful way.

The renown Director at UCSD Design Lab, Don Norman, states, "Human-centered design is a framework for addressing complex issues at the intersection of people and technology, using evidence to guide continual refinement. It treats systems of people, organizations and technologies. It applies the findings of many fields, especially the cognitive, behavioral and social sciences through a process of doing and making, testing and probing, experimenting to make things better, working with specialists from relevant disciplines, as well as the people for whom the designs are intended."

Corporations to start-ups are seeing that successful businesses, such as SAP, J&J and GE, are using human-centered design to create desirable products and experiences that solve business challenges and deliver user satisfaction, improving both the adoption curve for products and their competitive advantage. Companies are beginning to institute training programs to educate their engineers, scientists, marketers, and management in the use of human-centered design tools and methods within a dynamic, multi-disciplined team framework. The goal is to integrate a humancentered, empathetic mindset in product and service design early in the process and creatively solve complex business challenges, One example is the use of a method such as iterative prototyping to help prioritize appropriate and meaningful solutions, mitigating risk and improving outcomes.

The human-centered design approach considers the end to end experience for all users, both internally and externally from how the product is marketed, purchased, manufactured, distributed, used and serviced. Once companies see the value of this approach, they employ it in areas that may not have been previously considered, such as more empathic devices to administer drugs, reducing the fear of needles or pain and improving adoption. More intuitive interactions between users and products increase efficiency and make them safer to use. This approach is a catalyst for innovation, improving user satisfaction, achieving patented differentiation and creating experiences that connect users emotionally to the company's brand.

## Why Human Centered Design Matters to Business, Users and Patients

One case study is GE Healthcare CarescapeR860 patient ventilator which delivers significant value by providing exceptional interaction for users and highly valued benefits for patients. A fulltouch, human-centered user interface, designed by Intersection-Inc. in collaboration with GE Healthcare's multi-disciplined team, enabled three different users a clearer window into their patient's condition using a human-centered empathetic design. The patented user interface accesses faster historical patient data, current patient status and future clinical decision support. For GE, it improved the adoption curve and generated intellectual property; for the users it created ease of use and efficiency, and for the patients it reduced the average length of stay.

Today, product development is complex, as more human inputs, not just technology requirements, need to be addressed. Patients and users expect a seamless, personalized experience as technology becomes integrated into their lives through connected devices and predictive data. Savvy companies are integrating human-centered design earlier in their product development process to humanize technology to creatively solve business challenges and shift culture to be more empathic. This translates into value for all stakeholders while elevating brand equity, business success and innovation outcomes in a highly competitive marketplace.



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