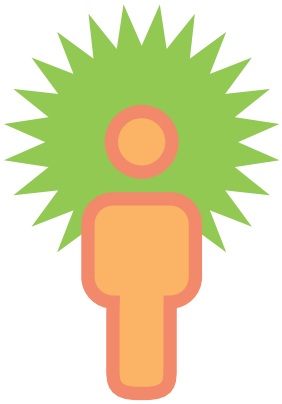
Design Thinking + Technology = Superior Customer Experiences

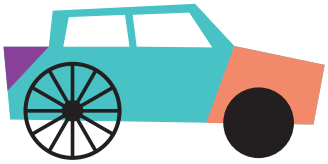


Accustomed to seamless interactions and personalized consumer experiences on their smartphones, customers now are looking for the same in their business experiences. To meet this rising expectation, companies are redesigning the user experience (UX) by implementing smart technologies and design thinking focused on the end user to mimic human interactions. Here are just four examples:

1. Smart user interfaces that allow customers to personalize their experience according to their preferences, giving them control of the interactions.
2. Chatbots that can understand voice or text and reply in a human manner.
3. Voice agents that sound human, responding and taking actions in contextually appropriate ways to customer queries.
4. Artificial Intelligence (AI) technology (such as email assistants) that can schedule meetings with other AI-based assistants without requiring humans to go back-and-forth to align each other's schedules.

These advanced design solutions are good for business. A 2015 study by the Design Management Institute found the stock prices of design-led companies outperformed the S&P index by 211% over the previous 10 years.[1] And a recent Forrester study found half of design-led businesses believe advanced design practices boost customer satisfaction and loyalty.[2]

Many companies are adopting agile business practices, automation and AI. However, those wishing to distinguish themselves need to deliver superior, personalized, multichannel customer experiences (CX). To do that, companies must master a blend of design processes with cutting-edge technological skills.



Getting it Wrong—A Bad Mix of the Outdated with the Avant-Garde

Designing experiences for customers begins by understanding their behaviors and preferences, and that means taking advantage of advanced analytics tools. Without fact-based insights into what customers want, companies will miss the mark in trying to create a superior CX.

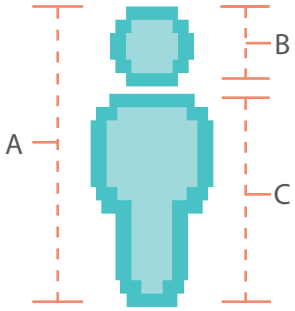
On the one hand, some CX designers are trapped in the past, their designs limited by what was possible 10 or 15 years ago, not what can be done today with new technologies such as virtual reality, augmented reality or chatbots with natural language processing capabilities. As a result, these designers produce CXs that are like an early automobile equipped with rough-riding wooden wagon wheels.

On the flip side, there are designers so eager to deploy the latest technologies that they fail to consider whether they have business value. These designers want AI, augmented reality or chatbots in all their designs, but fail to consider the humans who will use them, and the businesses that must pay for them. For example, they might spend too much money and take too much time to deploy a chatbot to answer questions that could have been resolved through a basic frequently asked questions (FAQ) web page.

[1] DMI, "The Value of Design," accessed July 19, 2018 at https://www.dmi.org/page/DesignValue

[2] Brozek, Christine Murray, "Design-led firms win the business advantage," Forrester, October 2016. Accessed July 16, 2018 at https://landing.adobe.com/en/na/products/marketing-cloud/350450-forrester-design-led-business.html

At both extremes, these CX designers are not practicing human-centered design thinking. Designers should begin with data at their fingertips and combine it with old-school user research and testing to develop a deeper understanding of customer needs and desires. Then they should pick appropriate technological solutions from the full toolbox of possibilities.



What Works: Designing Interactive CX Based on Deep Customer Knowledge

CX designers should never use technology for its own sake. Instead, they should only deploy technology to help customers accomplish tasks more efficiently, effectively, and effortlessly.

The best CX starts with a deep understanding of how a company's customers behave, what they perceive, and how they like to interact with the company and each other. CX design should seek to improve the customer's journey—making it simpler, faster, more efficient, and more pleasurable—by enabling continuous innovation, offering better or entirely new journeys for their customers. Chatbots, AI, and other advanced technologies may play important roles, but only in the service of improving the CX, or reimagining the way companies sell to or serve their market and customers.

Some of the most successful design-led companies have found ways to use technologies to improve and reconceive their CX. For instance:

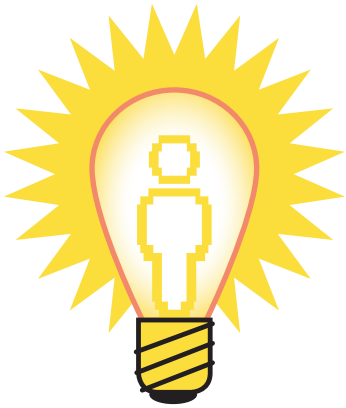
- Instead of forcing users to hunt for information they need, Google Assistant proactively provides contextual notifications about flight status, traffic updates, product shipments and more, without being asked.
- Netflix uses a complex algorithm to evaluate TV and movie content according to thousands of qualifiers, including elements of mood, aesthetic, and pace. The algorithm integrates with machine learning and AI to recommend programs that customers might not have found on their own. Customers clearly trust and appreciate these recommendations. Netflix says 80% of the content its viewers watch comes from these automated recommendations. They have been a big factor in the company's nearly tenfold revenue growth between 2007 and 2017 (from $1.2 billion to $11.7 billion).[3]

[3] Chhabra, Sameer, "Netflix says 80 percent of watched content is based on algorithmic recommendations," MobileSyrup, August 22, 2017. Accessed July 17, 2018 at https://mobilesyrup.com/2017/08/22/80-percent-netflix-shows-discovered-recommendation Revenue growth data from Statista, accessed July 23, 2018. https://www.statista.com/statistics/272545/annual-revenue-of-netflix/

Designers must be able to empathize with the problems customers face. For example, most companies have far to go in designing their CX to be accessible and inclusive for people with special needs. Also, as the senior population grows, CX designers will need to tailor the UX to their needs—for example, letting them adjust font sizes or putting titles on all videos for customers with hearing loss.

Such inclusive CX design sends a welcoming, compassionate message to all customers and build long-term trust and loyalty.

Finally, for CX design innovations to be sustainable, they must add value to the business. Delighting the customer by orchestrating a smooth, intuitive journey must go hand-in-hand with improving revenue. Market leadership depends upon finding the right balance between CX investment and profitability.



How Design-Led Thinking Spurs Innovation

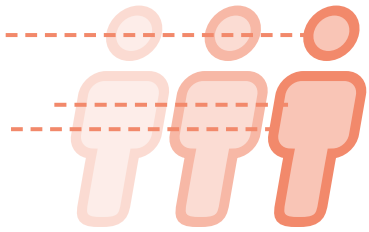
To design great customer experiences, designers must first gather insights on customer needs to determine which problems their designs should solve. Having gathered these insights, designers should work together to generate ideas, develop prototypes, and iteratively refine their best concepts.

Design-led thinking *incorporates* technology, but it *starts* with a focus on customers. For example, when Ford Motor's Lincoln division set about redesigning its Continental luxury car for the Brazilian and Indian markets, it began by considering the needs of luxury car users in those countries. Because both Brazil and India have a significant air pollution problems, Lincoln made sure the car had good air seals. And because traffic in large Brazilian and Indian cities is typically snarled, business meetings often are held in cars. Accordingly, Lincoln equipped its cars for those markets with tray tables and other conveniences to make it easier to hold meetings inside the automobiles.[4]

[4] "Breakthrough Innovation in the 21st Century," Harvard Business Review Analytic Services. Accessed July 17, 2018 at https://hbr.org/resources/pdfs/comm/merck/BreakthroughInnovationinthe21stCentury.pdf

Such companies complemented their data-driven designs with rapid prototyping. Using agile development methods, designers conducted tests, collected customer feedback, refined their ideas, and launched value-added products and services into the marketplace.

For example, when insurance and financial services company MassMutual realized its life insurance products were not appealing to consumers under 40, it worked with a global design partner to develop an educational, multichannel experience that would serve as a sort of "master's program for adulthood." To implement the program, MassMutual embraced new digital tools and new business processes. Committed to the principles of good CX, MassMutual designed the program to be flexible so that it can evolve as the company gleans new insights from participants.[5]

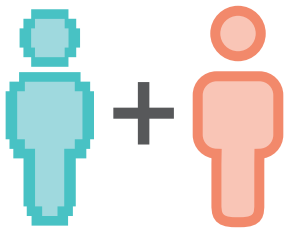


Service Design—Developing a Better Understanding of the Customer Journey

As digital ecosystems grow more complex, customer journeys and the systems needed to facilitate those journeys also become more complicated. A service design approach can help companies visualize, investigate and understand customer touchpoints and lifecycles even as they become more self-aware, comprehending the people, processes, systems, and organizational cultures that enable these experiences.

By examining the entire customer lifecycle—as well as their own capabilities—companies may discover places where and how their brands could do a better job meeting their customers' expectations and discovering other business areas ripe for innovation.

[5] Brown, Tim and Roger L. Martin. "Design for Action," Harvard Business Review, September 2015. Accessed July 17, 2018 at https://hbr.org/2015/09/design-for-action



Rethinking the Customer Journey—Matching New Interactive Technologies to CX

Companies have a golden opportunity to deliver interactive experiences through emerging channels. However, trying to match new technologies with traditional user journeys is unlikely to succeed. Instead, companies should attempt to imagine creative use cases that disrupt existing journeys.

In designing these innovative processes and pathways that take full advantage of new technologies, companies should keep three guardrails in mind:

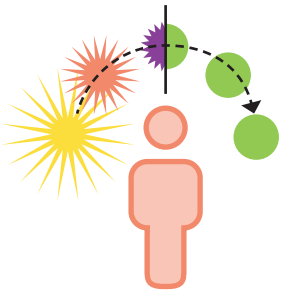
1. **ROI**—Define key metrics at the beginning of the design process. Then measure performance at milestones along the way to make sure projects deliver their intended benefits.
2. **Agile engineering**—Respond to feedback with an iterative improvement loop that fuels faster development and leads to continuous improvement in CX.
3. **Lean user experience**—As work progresses iteratively, look for ways to minimize waste and maximize resource utilization.

Designing Results—What to Expect from Successful CX/UX Transformations

By following these, companies can achieve five types of CX transformations:

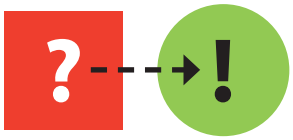
1. **Moving from taking orders to making recommendations.** Any company can respond to demand and give customers the products they request. Design-led companies advance to the next level by suggesting products and services that customers are likely to enjoy and appreciate.

   Companies that excel in this field (like Netflix and Amazon) collect and analyze large data sets to develop a deep understanding of the customers' latent wants and needs. Ultimately, the goal is to know one's customers so well that a company can reliably *anticipate* what sorts of products or services will delight them.

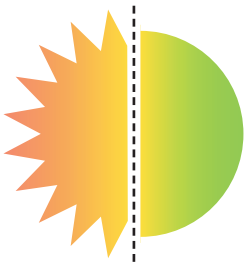


2. **Changing from *solving* problems to *preventing* them.** Any company can react to problems that customers report; better ones solve problems before they occur.

   Good CX designers constantly evaluate customer journeys to identify potential problems before they become major headaches. Companies can then nip them in the bud to keep customers happy and loyal.

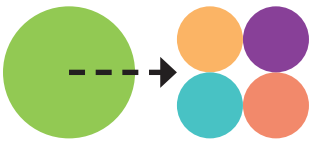


3. **Going from clueless to clued-in.** Clueless companies do not have a finger on the customer pulse. Consequently, they are caught by surprise when customer dissatisfaction surfaces. Clued-in companies continuously monitor the effectiveness of their CX. They notice pain points early on and have full situational awareness of any problems customers may be having with a product or service. As a result, they can correct problems quickly and give customers a better experience with their products or services.



4. **Shifting from lengthy response times to instant help.** Years ago, many industries moved at a slower pace. In those days, customers might be willingly to wait several days (or longer) for solutions to their problems. Now customers expect problems to be resolved in hours or even minutes. Fortunately, technological advances can help companies keep pace.

   For example, some financial advisory firms have begun using AI and neural networks to expedite answers to customer inquiries. One firm with which TCS has worked uses an automated system that manages, analyzes and responds to complex client emails. This system understands each email's content, interprets the customer's intent and emotion, then accurately responds with a set of suitable recommendations.[6]



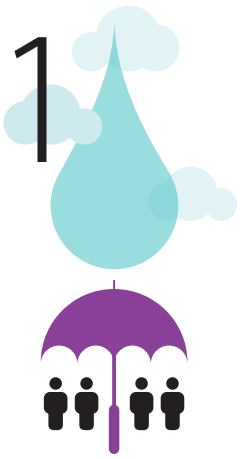
5. **Transitioning from simple to complex uses of automation.** Plenty of companies use automated services to help customers with simple problems. This sort of automation might administer a phone tree or remind customers of their account balances.

   That's child's play compared to the real prize of using AI and machine learning to build automated services that solve problems in ways that dramatically improve CX.

[6] "Artificial Intelligence Helps Financial Advisors Answer Client Questions Faster," Tata Consultancy Services, 2017. Accessed July 17, 2018 at https://www.tcs.com/content/dam/tcs/pdf/technologies/artificial-intelligence/abstract/ai-helps-financial-advisors-answer-client-questions-faster-0917-1.pdf

Design-led CX—Three Companies Improving Customer Journeys and Reaping Rewards

Across industries and geographies, companies have begun using design thinking to improve CX. Each of these examples show how design-led initiatives to improve CX can help enterprises solve major problems and achieve significant ROI:



Changing the weather for customers in Scotland

In Scotland, a large water utility faced supply interruptions, low pressure, contamination threats and customer fury each winter when low temperatures caused aging pipes to freeze and burst. The utility's call centers were overwhelmed with complaints. Its reputation suffered a serious blow, and regulators penalized the company with heavy fines. The utility could not change the weather, but it could change the way it handled customer complaints. It adopted flexible, omnichannel methods of taking customer complaints via email and through its website, as well as over the phone. This approach simultaneously lowered costs and reduced pressure on the call centers.

The new system the company implemented had the technological capability to automate service orders and dispatch repair crews. It also gave the utility the ability to update customers via text message on the progress of repairs, while using predictive analytics and personalization to customize each customer's experience. By using agile engineering methods and advanced technologies such as automation, the utility designed a lean, frictionless CX. As a result, it saved £12 million and saw customer complaints drop 80% in a single year.

Streamlining design for profit

Eaton Corp. PLC, the Ireland-based leader in power management and equipment sales, was making customers struggle through a complex purchase process. Even worse, the company incurred steep operating costs as it juggled more than 30 online storefronts and tried to cope with siloed product categories spread across the enterprise. Determined to resolve these issues, Eaton embarked on a design-led process to improve

the way customers accessed and experienced its products, services, promotions and offers. There were three major components to the redesign: a global ecommerce strategy with streamlined processes built on a modern technological foundation; a unified online storefront and product catalog, and localized solution support for nine languages, six currencies and various local units of measurement.

These and numerous other changes have helped the company grow strongly in recent years. Annual revenue has risen nearly 50% since 2010, from $13.7 billion to $20 billion.[7] Customers reported greater satisfaction with the purchase process. Eaton managed to create new cross-selling opportunities while simultaneously reducing its operating costs.

Enhancing engagement through integration and customization

The customers of U.S. health insurance company Humana had to deal with more than 60 separate websites. The $54 billion company (2017 revenue[8]) wanted to create an integrated, unified digital brand that would offer its users personalized, consistent CX across all channels.

Using a design-led approach, the company updated more than 5,000 webpages to offer a better UX. Its new Web presence featured rich media and responsive user engagement features. By gathering more than 150 components under a single digital platform, Humana gave customers a consistent, unified experience with the company. The new digital platform made it easier for Humana to engage with its customers through social channels. It also gave Humana the ability to customize and contextualize its communications strategy, making sure that customers receive the right promotions at the right time. These improvements to its digital CX helped Humana increase its customer base 18%.

[7] Eaton investor relations and annual report pages. 2010 data from http://www.eaton.com/ecm/groups/public/@pub/@eaton/@corp/documents/content/pct_260900.pdf accessed July 23, 2018. http://www.eaton.com/us/en-us/company/investor-relations.html

[8] Modern Healthcare, Feb. 7, 2018. Accessed July 23, 2018. http://www.modernhealthcare.com/article/20180207/NEWS/180209928

AI, natural language processing, smart chatbots and automation have advanced to the point where they can play a major role in meeting customer demands and wishes.

The Best Time to Build Better Digital CX? Now.

Companies across multiple sectors around the world have discovered the value of using design-led thinking to give customers smoother, easier and more interactive experiences.

Advanced technologies like AI, natural language processing, smart chatbots and automation have advanced to the point where they can play a major role in meeting customer demands and wishes.

The caveat here is that these tools are only effective if they are deployed systematically and purposefully through a design-led process. Technology for its own sake can be an expensive distraction. Technology used in the service of meeting and exceeding customer expectations can be a game changer.

Of course, technology also has an important role to play in discovering these customer insights through the collection, analysis and reporting on big data sets. Using these insights, companies can then deploy agile, lean and iterative processes to find which technological solutions will have the biggest impact on CX and offer the greatest competitive advantage in customer attraction and retention.

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