Digital Transformation Should Start with the Customer Experience
Unfortunately, digital transformation efforts at companies across the globe often aren’t putting customers at the center of their endeavors. Instead, new technologies are being used to create operational efficiencies to reduce costs. While that’s important, too often the price companies pay for this narrow focus is exasperated customers struggling with poorly designed experiences and inconsistent and inauthentic touch points with the brand.

Yet a number of other businesses, both B2B and B2C, are starting to realize that digital transformation strategies must begin with the customer experience (CX). They understand that creating a differentiated and competitive experience attracts new customers and keeps them coming back—a major driver of profit and recurring revenue. They have found that superlative, consistent, and authentic experiences have better ROI than advertising.

Enterprises across the globe are making significant investments in digital transformation efforts. Technology researcher International Data Corp. forecasts that these expenditures will climb by 16.8% in 2018 to nearly $1.3 trillion. By 2021, they will have jumped to more than $2.1 trillion. This rapid proliferation of smart technologies, combined with the declining cost of computing and storage power, has put most technologies, especially analytics and advanced machine learning, in the hands of practically every business, no matter its size. Thus, just having the latest technology won’t provide a competitive advantage.

Business guru Peter Drucker famously said, “The purpose of a business is to create a customer.”¹ Six decades after he penned that sentence, a number of enormously successful CEOs have taken Drucker’s credo to the max, among them Jeff Bezos of Amazon (who has driven his firm to focus on “customer obsession” vs. “competitor obsession”)² and Richard Branson (whose many Virgin companies have ascended in industries known for poor service). Those and other CEOs believe that creating customers and keeping them happy is at the center of their success.

Customers are demanding better experiences from the organizations they do business with, and companies must meet or exceed those demands to be successful. Customers expect performance, responsiveness, authenticity, and consistency in messaging and tone. The winners will be those companies that create customer experiences that are better than their competitors, and more in tune with how customers want to do business with them.

Comcast, the $84 billion U.S.-based media, entertainment and communications company, is a case in point. The company had created several new product innovations, including voice-activated controls and a cloud-based video platform for viewing TV programs and movies on multiple devices. But the customer satisfaction needle didn’t move as expected. Comcast’s leaders realized that its customer experience needed to be as novel and useful as its product innovations. So, Comcast embarked on a major reorganization, putting product innovation and customer experience under the same roof. The Result? A highly personalized experience that uses machine learning to recommend content customers love, need, and want to experience.

But equally important, Comcast didn’t just focus on the front-end of the experience. It tracked the impact of its offerings through IT investments, accounting and customer care, and used technology to ensure that the end-to-end customer experience it delivered was both smooth and cost-efficient.

The big lesson: When looking at technologies for back office applications, Comcast thought beyond efficiencies. It made sure that customers would have a far better experience in using its product innovations, one that would become a competitive advantage to Comcast.¹

Focusing digital transformations on the customer experience forces companies to address, empathize and understand all the touchpoints in which they interact with customers every day: the marketing campaigns they view, the sales people and processes with which they engage (whether via humans or digital assistants such as chatbots), and where they first encounter a company’s products and services—online or offline.

Data points the way to where to make improvements. Companies must focus their transformations using enterprise and ecosystem data to discover customer preferences and patterns. They then need to model a competitive holistic experience. Customer data, and the insights derived from it, is the key to understanding where to invest and which investments will yield significant ROI.

Why is Keeping the Customer in Mind So Hard?

It’s easy to take one’s eye off the customer when tackling digital transformation. A common challenge is a relative dearth of accurate customer insight. Customer data is often trapped within the organizational silos of the sales, customer service, marketing, and finance departments—and can’t be linked to create a holistic view of the customer. A lack of usable, harmonized data inevitably leads to endless debate about what the customer experience should be, why, and where. As a result, transformation initiatives lose steam, and unsubstantiated assumptions can lead to futile outcomes.

Moreover, businesses sometimes see CX solely either in terms of customer acquisition or customer service. Thus, they don’t think broadly about customer preferences and how to design an experience that caters to continuous engagement. Starbucks, in contrast, thinks about far more than the efficiencies of serving a cup of coffee. It is focused on delivering a superior in-store experience, going to great lengths to provide warm, comfortable and useful environments (providing Wi-Fi, for example) where people can socialize or work. (Just as important, the company also has an easy-to-understand loyalty program).

A poorly designed CX transformation can actually worsen the overall experience a company provides customers. Individual functions chase digital ideas in a strategic vacuum. That may create efficiencies and productivity gains for themselves, but for no other part of the organization. And they also miss most, if not all, opportunities to use digital technology to improve brand awareness, customer acquisition, and customer retention.

Indeed, not putting the customer experience first risks sending them running to competitors. If the user experience (UX) is confusing or clumsy, customers will run to competitors. And, if the CX and UX are not consistent across channels, and customers can’t do what they need to do, when and how they want, they are likely to look elsewhere for a better experience.

Blockbuster learned a hard lesson about slighting the customer experience. The once-famous U.S. video retailer was not avoiding technology; it had invested in analytics to improve the profitability of its in-store video mix as the volume of available content rose. Its rival, Netflix, however, began with the customer experience, deploying an online recommendation engine that helped consumers find programming in the content cornucopia that best suited their interests and tastes. (Netflix also helped customers avoid having to go to video rental stores and find the videos they wanted were out of stock). At the same time, Blockbuster tried to guard its bottom line by maintaining its customer-hostile late fees, which customers detested. Netflix touted the fact that it had no such fees.

Netflix thrived; Blockbuster failed, filing for bankruptcy in 2010. The lesson is that digital transformation efforts that don’t put the CX first can waste both money and effort. Or, as Blockbuster discovered, it can end the game for good.
Revamping the Customer Experience

Companies can begin their digital transformation by following a two-step process to transform the experience they offer their customers. The starting point is to be informed by data, driven by empathy, and focused on real change. Once an organization has a firm view of customer patterns and preferences, and the current state of its CX, it can turn to techniques such as design thinking, and enablers such as artificial intelligence and advanced machine learning, to develop new methods of delivering a CX that offers significant ROI.

Valuable tools include mapping the customer experience and journey, service blueprinting, and using collaborative and iterative design processes such as agile to develop innovative and differentiating CX and UX in smaller and faster increments.

1. Data-informed Insights

Businesses should generate insights about the customer experience across the entire customer lifecycle. From brand awareness, to triggers that launch a buying process, to the decision to make another purchase, organizations should identify both their current strengths and the pain points that might drive a customer to a competitor. Businesses need to understand where customers want to engage with them, what needs customers want fulfilled and how they want to engage with the brand.

For example, by using data to understand what people do in their cars, automakers are extending their relationship with customers beyond the point of purchase. By leveraging the Internet of Things (IoT), artificial intelligence (AI) and analytics, automakers are rapidly becoming information companies. Automaker BMW, for example, thinks of its i3 electric cars as much more than vehicles. The company is testing services such as DriveNow, a car-sharing app for BMW i3 and i8 cars, and ParkNow, which identifies garages with available parking and allows users to reserve spaces in advance, thereby providing experiences that becomes essential and drives loyalty.6

Data-informed insights also help automakers provide maintenance services with in-vehicle sensors that can tell them when a customer needs an oil change. On-board GPS can steer them to a nearby partner or dealer. This provides automakers with incentives to use their partners and create incremental revenue while providing a valuable, compelling CX that tells the customer the company knows who they are and what they want and need.

2. Thinking by Design

Design thinking puts the end user first and addresses their environment and what they need and want from a product or service. For example, when Lincoln redesigned its town car for the Brazilian and Indian markets, it looked at the needs of luxury car users in a larger context. Both Brazil and India suffer from heavy traffic and air pollution, so, Lincoln made the car airtight. Because of endemic traffic delays, business meetings are often held in cars, so, Lincoln equipped them with tray tables and other conveniences.⁷

Design thinking must be informed by rich data sets about customers and their environments. These insights lead to ideas that can be tested rapidly through prototypes—the foundation of agile development. The product concept can then be refined based on those tests plus customer feedback, and only then brought to market.

This type of thinking has helped MassMutual, a major U.S. insurer with $38 billion in annual revenue. By collecting and analyzing customer data, the company realized that any new life insurance product it created was unlikely to appeal to the under 40 demographic. These consumers needed to be educated about such a policy’s value to them. So, in 2014 MassMutual developed an education-focused buying experience based on what it called a ‘master’s program for adulthood.’ Instead of providing just an online learning program, MassMutual created a multi-channel experience including state-of-the-art budgeting and financial tools, and a curriculum ranging from investing in a 401(k) retirement account to buying good value wine. The service also offered offices with classrooms and libraries that customers could use. Because the program was so different from what MassMutual typically offered, the entire organization had to be redesigned to support it—a hallmark of a successful digital transformation driven by the customer experience.⁸

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The Tech Under the Hood
Developing compelling and competitive customer experiences is a team sport. Organizations need to bring together a diverse range of people and disciplines to fertilize thinking and develop the best ideas based on data, design thinking, and a strong business case all of which feed off one another.

Data and analytics inform the design process. Analytics can then establish which design choices are the best investments. Finally, design processes yield prototypes to test which provides the greatest ROI.

Companies should use both internal and external data, depending on the product and predictors of success. For example, insurance and financial products rely heavily on external data such as life events (e.g., buying a house or having a baby). Food products, on the other hand, often correlate with attitudinal characteristics associated with lifestyle. Both use internal data such as responses to offers to understand what strikes the strongest nerve in the market.

Sensor data from the IoT can amplify analytics efforts. By collecting data on products and services as they are used in the field, companies can greatly expand their offerings and improve the CX. Automakers, for example, could find out what restaurant their drivers typically eat at and then partner with those restaurants to offer incentives to stop there. It’s important to note that the new revenue is derived from the data, and insights into behaviors—not from the car itself.

The same applies to other partners that provide service such as parts and body work. Social media rounds out the picture by assessing the sentiments customers hold about a brand or product. Some of the under-the-hood technologies and methodologies that companies can use to improve or reimagine their CX and UX include:

The AI Advantage
Artificial intelligence can strengthen the value of both internal and external data through capabilities such as trend spotting and predicting changes in markets and customer behavior. Companies are using AI to take customer segmentation, personalization, and targeting to entirely new levels of competitive strength. Airlines, for example, use AI to offer dynamic pricing to individual customers as they purchase tickets online. Digital-native Uber applies the same principle.

One major retailer uses AI to guide customers through its stores. The company installed an app on every employee’s mobile device. The app provides instant access to purchasing trends on specific items and in-stock status. In addition, geo-location software tells employees in which aisles customers are shopping so they can approach them to talk about the items they are looking for and what promotional offers they might take advantage of. The app also shows employees which items are most profitable. Based on this information, the retailer can segment customers based on profitability and provide them with consistent

marketing messages tied to their visible preferences instead of the less accurately targeted email blasts so common among retailers. The retailer’s results hit both top and bottom lines: an 8% increase in revenue with a 20% decline in marketing expenditures.

But the value of AI in retailing and other industries goes far beyond personalized marketing messages and helping employees lavish attention on the most profitable products and customers. Those AI applications are largely based on ‘structured’ digital data—the kind that has populated databases for decades (e.g., customers’ past purchases, product specifications including pricing, and the like). One of the great but largely untapped sources of AI technologies is in making sense of ‘unstructured’ data—digital copies of handwritten documents, images of customers and products, and other information that requires advanced computer vision technology to digitize it, as well as enormous amounts of computing power to process it rapidly. (That computing power is increasingly the preserve of public cloud vendors such as AWS, Google and Microsoft that have spent billions of dollars on advanced data centers).

This kind of artificial intelligence, which can capture and make sense of spreadsheets as well as static and moving images of people and products, will enable companies to offer customer experiences that many can’t even imagine today. Like what, you might be asking? One is shopping in a store without a checkout stand or checkout clerks. The technology exists today to allow a store’s customers to pull products off its shelves, put those items into a bag, and then walk out—and pay automatically without having to swipe a credit card or pull a smartphone out of their pocket.

Think that’s science fiction? No longer. In fact, it’s happening at companies like (not surprisingly) Amazon. This January, it opened a grocery store called Amazon Go in its home city of Seattle. The store has digital cameras in the ceiling and the company’s AI technology at hand to make sense of all the action in the aisles. By carrying a smartphone, customers enter the store and scan a QR code on their Amazon Go app. Then they travel down the aisles and grab products off the shelves. The cameras, the AI software that’s working behind the scenes, and a digital connection to the customer’s credit card account enable the store to recognize what products the customer left with and then charge them to their account.9

No checkout lines. No checkout stands. No checkout clerks. And yet no shoplifting. Customers get through a grocery store faster, which benefits customers, of course. And Amazon gets more customers in and out of the store, which means it can handle more customers.

That’s the power of the next wave of AI—technology that can recognize images and video, not just numbers.

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**Design Thinking**

Design thinking has emerged as one of the most powerful ways to encourage out-of-the-box ideation. Design teams shouldn’t be relegated to designers. They should include strategic thinkers, operations managers, front-line customer service managers, designers, technology experts, and others who have keen perceptions about the world outside the company’s four walls. A vibrant combination of skills and perspectives on customer needs is critical to figuring out how to use technology to get the greatest value for customers.

Data about customer preferences and existing trends are where design thinking begins. For example, realizing that consumers were becoming accustomed to making purchases, streaming music, buying movie tickets, and renting cars by pushing a few buttons on their smartphone, Disney invested approximately $1 billion into The Disney Experience for its Disney World theme park in Orlando, Florida. Visitors receive a wrist band that allows them to open room doors, make reservations for attractions, and pay for food and other items with a swipe of their hand. Launched in 2013, Disney estimates that 80% of its patrons use the device, attesting to its popularity as part of the Disney experience.\(^\text{10}\)

U.S. retailer Target acted to improve its customer experience when it added an indoor mapping section to its smartphone app. The company refers to it as a GPS for the customer’s shopping cart. All a customer has to do is clock on an item on the shopping list they have created in the app and the map shows them where it is. It also displays promotions and where the relevant items are located. (The app uses Bluetooth beacons built into new LED lighting to enable the service).\(^\text{11}\)

**Agile Development**

Agile development is a cornerstone of design thinking and effective product and experience design. The method relies on frequent tests and iterations so that a final product or service can be developed quickly, and be pressure tested before a company makes a major investment.

Agile product development starts with a minimum viable product that includes only the essentials that need to be validated. The process then refines the idea via iteration and market input. Companies can then test and refine other features in rapid succession to determine the scope of the final product or service. This process significantly reduces the chances of falling flat in the market.

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Complex products often need a robust technology platform for prototype testing. Cloud-based system providers can meet the needs of global firms using algorithms to analyze complex usage patterns and can also test in multiple languages.

Insurance provider USAA recently opened its own design studio in Austin, Texas, staffed with 10 professionals from different fields and disciplines. The goal was to look beyond solutions typically offered by insurers to create game-changing improvements in USAA’s CX. USAA members “don’t compare us to other insurers,” says Meriah Garrett, USAA chief design officer. “They compare us to every other digital interaction they have with Facebook, Google, Amazon and Venmo.” (Venmo provides digital payment services.) To offer a digitally competitive CX, USAA focused on self-service offerings such as on-demand updates on customer policies, payments, accounts, balances, and so on, delivered through a mobile app. The company also plans to leverage machine learning and AI to gain deeper insights into what more it can offer.\(^\text{12}\)

The best customer experiences are interactive and delivered through a mobile device. But the mobile experience must be consistent with the experience at other customer touchpoints. This can be a significant challenge, especially for financial services institutions. According to Forrester Research, banks are losing sales because they don’t help customers research or apply for financial products on their phone.\(^\text{13}\) Making matters worse, according to Forrester, is the high level of usability flaws in many banking mobile apps that make them very hard to use.\(^\text{14}\) On the other hand, USAA received Forrester’s highest ranking for mobile usability, as did the global Spanish banking group BBVA and Ally Bank in the U.S.\(^\text{15}\)

\textbf{CX Harmonization}

Given the proliferation of channels available to consumers seeking information, goods or services, a company’s CX and UX need to be consistent across all of them. A seamless multi-channel experience is no longer a nice-to-have; it is a must-have. Voice activated devices such as Amazon Echo and Google Home now seamlessly integrate with websites, social media, online search and recommendations, and that’s what consumers want and increasingly demand. Providing that harmonized and personalized CX and UX depends upon having a single view of the customer that combines data from all interaction points.
A consistent customer view and experience is essential for both B2B and B2C companies. Businesses such as Nationwide, Vanguard and USAA have achieved this consistency. For example, customers can interact with Nationwide via mobile apps, email, or Amazon’s digital assistant Alexa. In any case, the message and experience are always the same. Customers can ask Alexa anything from when their next insurance premium is due to when their claim is scheduled to be reviewed. If Alexa can’t answer the customer’s question, she connects him or her with customer service. If she can’t understand what the customer is saying, she alerts Nationwide’s system which automatically calls the customer back. And the call will be consistent with the phrasing and tone the company uses across all channels.¹⁶

Mutual fund advisor Vanguard also has created a consistent and compelling omnichannel CX. A challenge for many retail financial companies is understanding which investments make the most sense for specific customers. Vanguard created its virtual Personal Advisor to do just that.¹⁷ The Advisor is personalized, easy to use and, when appropriate, connects the customer to human financial advisors, thereby reinforcing the firm’s commitment to providing low-cost guidance for financial planning. To develop these experiences, Vanguard used its own business design methodology. As John Mercante, Vanguard’s CIO, says, “The process allows Vanguard to take an iterative approach and leverage an experimentation-based design process.” The iterative development allowed Vanguard to test individual components of the service with small groups of early adopters to improve it before it was launched. And the company’s IT architecture was configured to help the design team test, iterate and reuse components of the service in other offerings.

Before it developed its app, USAA’s offerings looked the same to all customers. Now, personalized landing pages show those tasks and activities the individual customer most frequently conducts. To make the CX seamless, USAA has created a contact handoff system through the mobile app that connects users to a service representative. The representative can see relevant data about the customer before he or she is connected so the agent can prepare for the conversation. Sharing context and customer data across all touchpoints saves customers time and allows them to define the experience they need and want.¹⁸

¹⁶ Nationwide, Nationwide is on Amazon Alexa, accessed May 23, 2018, https://www.nationwide.com/amazonalexa.jsp
A To-Do List for Executives
To create a superior customer experience, companies should begin by benchmarking customer behaviors in each channel they occupy. Then, they need to answer these critical questions:

- Does the organization have channel transition plans for its various IT systems so they all can connect?
- Is the organization measuring customer satisfaction with the CX? For example, are voice and text analytics being used to assess levels of frustration or satisfaction?

Once these questions are addressed, the business needs to turn to the talent part of the CX equation. Creating compelling customer and user experiences requires the services of a dialogue editor, who can write scripts across all channels and work with creative teams to make sure the messages are in sync with each target audience. Communications must also match the customer’s vernacular, not the company’s internal jargon. If businesses don’t, they risk frustrating customers and finding themselves the target of negative social media sentiments.

To make the most of design thinking, businesses should use it to personalize the customer experience as much as possible. For instance, a credit card company can know where a card holder is via their smartphone. By knowing that and seeing where purchases are being made, the company can detect fraudulent activity and notify the customer. This capability builds the trust and confidence that drives loyalty. Equally important, it gives the customer the sense that the company knows him or her. And that is the CX that wins.

The same capability and analysis can help the credit card company create affiliate marketing programs that offer coupons for restaurant chains that customers can use at their discretion. The card issuer can analyze the ROI of this value-added service and revise as needed in a continuous re-evaluation of its offerings. This re-evaluation is critical as customer experiences are highly competitive. Today’s great idea quickly becomes tomorrow’s table stakes.

To keep their customer experiences fresh and competitive, companies should constantly strive to reduce the number of steps a customer must follow to conclude a transaction. Using automation enabled through AI is becoming the norm for providing experiences at the speed customers want. Equally important, the UX should be as simple and as intuitive as possible. Amazon is the classic example; once a customer puts something in the virtual shopping cart, it only takes one click to make the purchase.
Follow the ROI
Creating and upgrading customer experiences takes a substantial investment in time, money, talent, and other organizational resources. Consequently, many companies struggle to build their CX business cases, leaving them inadequately funded, or on the budget’s cutting room floor.

Again, finding the ROI begins with data. By sharing customer data across business units and functions—from sales to service to marketing—organizations can see the value of CX investment, whether it’s attracting new customers, increasing customer retention times, or increasing sales for innovative products or services developed to meet new data-derived needs. For instance, opportunities for cross-selling proliferate when customers are shown products synergistic to ones they’ve just purchased. Of course, that sales data must be visible to R&D and marketing.

Once the company has established the CX ROI, it needs to bake it into the design process. For example, an IoT coffee maker designed to track customers’ coffee consumption and let them know when they need to reorder coffee pods must calibrate the potential extra pods sold against the cost of adding IoT technology to the coffee maker. That calculation could lead to more optimal replenishment options, such as working with a third-party provider.

Your Customers Aren’t Waiting for You
Customers are picking up their mobile phones to find and purchase goods and services. They’re talking to Alexa. Customer behaviors are changing, and in some sectors, they’re changing very quickly. All that businesses can be sure of is that their customers’ preferences will change.

Successful companies are moving aggressively to digitize their business processes and operations to change along with their customers, rapidly. The most successful organizations begin by focusing on where their customers are moving, what they want, and how they want it. They begin their digital transformations with the customer experience. They use customer data to inform decisions and commit to a design thinking approach to create new experiences built on flexible, modern platforms. They use evidence-based business cases to justify investment. And they test new ideas through rapid iteration to make alterations and validate assumptions.

This is a never-ending process. Leading companies understand this. Customers never stay still. And neither should the experiences that companies provide them.
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