

Prediction: The future of CX

Designing great customer experiences is getting easier with the rise of predictive analytics.

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Companies of all stripes have invested heavily in tools and technologies to help them understand their customers more deeply and to gain the advantages of superior customer experience (CX). Yet as leaders strive to form a more complete picture of customer preferences and behaviors, they continue to rely on aging survey-based measurement systems that for decades have formed the backbone of CX efforts. Companies use these systems to track CX performance through brand or relationship surveys, “close the loop” on customer feedback via post-transaction surveys, and even plot strategic moves by attempting to mine the feedback from their regular surveys over time. Entire teams dedicate themselves to managing questionnaires and boosting response rates—and the resulting metrics can shape everything from employee bonuses and executive compensation to strategic investment decisions.

The trouble is, executives increasingly recognize that survey-based measurement systems fail to meet their companies' CX needs—although surveys themselves are an important tool for conducting research. In fact, this article draws on our recent survey of more than 260 CX leaders from US-based companies of all sizes.¹ Ninety-three percent of these respondents reported using a survey-based metric (such as Customer Satisfaction Score or Customer Effort Score) as their primary means of measuring CX performance, but only 15 percent of leaders said they were fully satisfied with how their company was measuring CX—and only 6 percent expressed confidence that their measurement system enables both strategic and tactical decision making. Leaders pointed to low response rates, data lags, ambiguity about performance drivers, and the lack of a clear link to financial value as critical shortcomings.

¹The online survey, conducted in collaboration with AlphaSights and Gerson Lehrman Group, was in the field from November 18, 2019, to January 15, 2020, and garnered responses from CX leaders at companies spanning more than a dozen industries including financial services, healthcare, high tech, logistics, retail, and travel.

A few leading companies are pioneering a better approach that takes full advantage of the wealth of data now available. Today, companies can regularly, lawfully, and seamlessly collect smartphone and interaction data from across their customer, financial, and operations systems, yielding deep insights about their customers. Those with an eye toward the future are boosting their data and analytics capabilities and harnessing predictive insights to connect more closely with their customers, anticipate behaviors, and identify CX issues and opportunities in real time. These companies can better understand their interactions with customers and even preempt problems in customer journeys. Their customers are reaping benefits: think quick compensation for a flight delay, or outreach from an insurance company when a patient is having trouble resolving a problem. These benefits extend far beyond the people typically thought of as “customers”—to members, clients, patients, guests, and intermediaries. Early movers in the world of customer-experience analytics herald a fundamental shift in how companies evaluate and shape customer experiences.

In this article, we explore how data and analytics are beginning to transform the art and science of customer experience. We present new research that brings clarity and a fact base to the shortcomings of survey-based measurement systems. We then examine how a few leaders have implemented data-driven CX systems and in turn reduced churn, boosted revenue, and lowered cost to serve. We end with insight on how to get started, including four key steps for CX leaders as they transition toward data-driven insight and action.

The benefits are not automatic. Those just starting out will face stumbling blocks and organizational resistance. But with commitment, even companies with rudimentary CX systems, limited data, and a shortage of data scientists can begin laying the groundwork to transform their CX programs and their customers’ experiences.

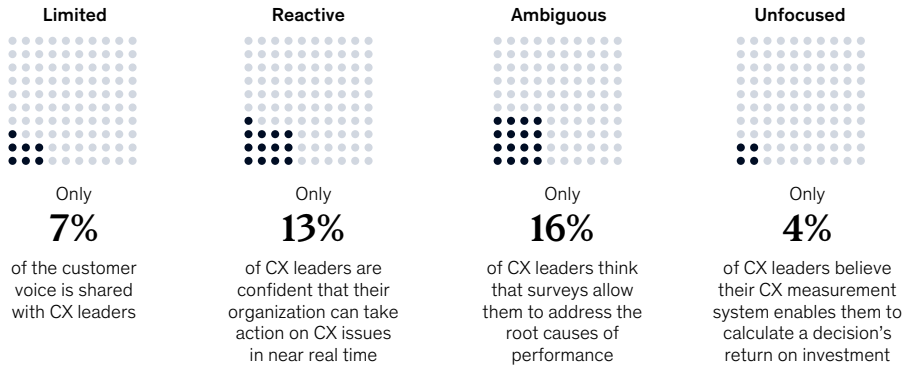
The CX programs of the future will be holistic, predictive, precise, and clearly tied to business outcomes. Evidence suggests that the advantages will be substantial for companies that start building the capabilities, talent, and organizational structure needed for this transition. Those that stick with the traditional systems will be forced to play catch-up in the years to come.

‘Survey says’: The shortcomings of traditional CX measurement

While surveys themselves are a valid means of gathering customer insight, they fall short as a management tool for measuring CX performance and identifying and acting on CX opportunities. For organizations to lead from a customer-centric position, they increasingly need a comprehensive view of the full customer journey, as well as the ability to obtain deep, granular insight on what is driving customer experience. They need immediate and individual signals in order to take action “in the moment” and to create relevant experiences for each customer, and they need to demonstrate that the experience enhancements they would like to invest in will result in positive ROI. Survey-based systems have four major flaws that make those critical tasks nearly impossible (exhibit).

Survey-based systems can no longer meet the demands of today's companies.

Four flaws with today's survey-based customer-experience (CX) measurement systems



Source: 2020 McKinsey Customer Experience Survey, conducted in collaboration with AlphaSights and Gerson Lehrman Group

- 1. Limited:** The typical CX survey samples only 7 percent of a company's customers, providing an extremely limited view of what customers experience and value. In fact, only 13 percent of the CX leaders we surveyed expressed full confidence that their CX measurement system provides a representative view of their customer base.
- 2. Reactive:** Surveys are a backward-looking tool in a world where customers expect their concerns to be resolved increasingly quickly. Nearly two-thirds of respondents ranked the ability to act on CX issues in near real time as among their top three priorities, but only 13 percent of leaders expressed certainty that their organizations could achieve this level of rapid insight through existing systems.
- 3. Ambiguous:** Surveys often fail to reveal the root causes of customer sentiment. In fact, scores can vary based on many outside factors, including geographical bias and industry shocks, making it difficult to perform reliable root-cause analysis using surveys alone. Only 16 percent of CX leaders said that surveys provide them with granular-enough data to address the root causes of CX performance.
- 4. Unfocused:** As one executive at a large financial-services company put it, "The association between survey-based scores and business outcomes is not well understood, and, as a result, many parts of the organization simply claim a business impact from their CX initiatives with no real evidence." Several companies have recently come under fire for basing investment decisions on a survey-based score alone. Remarkably, of the CX leaders we surveyed, only 4 percent said that their system lets them calculate the ROI of CX decisions.

Why use a survey to ask customers about their experiences when data about customer interactions can be used to predict satisfaction?

Predictive customer insight is the future

Since survey-based systems became ubiquitous, the world of insight generation has transformed through impressive advances in the ability to generate, aggregate, and analyze data. Companies now have access to a broad array of data sets: internal data on customer interactions (both digital and analog), transactions, and profiles; widely available third-party data sets that cover customer attitudes, purchase behaviors and preferences, and digital behaviors, including social-media activity; and new data sets on customer health, sentiment, and location (in stores, for example) generated by the Internet of Things (IoT). Other business disciplines, including marketing and revenue management, have already transformed through the aggregation and analysis of these vast data sets. The contrast is stark: Why use a survey to ask customers about their experiences when data about customer interactions can be used to predict both satisfaction and the likelihood that a customer will remain loyal, bolt, or even increase business?

Some CX leaders have taken the plunge and have begun making use of the data on offer, drawing valuable insights that can prompt alerts and guide swift action to improve customer experiences. While the specifics may vary across companies and industries, this approach centers on a predictive customer-experience platform that consists of three key elements:

1. Customer-level data lake

First, the company gathers customer, financial, and operational data—both aggregate data and data on individual customers.² The company processes these data and stores them in a cloud-based platform. Comprehensive, connected, and dynamic customer-level data sets allow the organization to map and track customer behavior across interactions, transactions, and operations. Whereas surveys reflect the views of a subset of customers at a single point in the past, these rich data sets encompass the full customer base and span the customer journey, thereby shedding light on the root causes of performance.

The data lake serves as the foundation for developing a rigorous understanding of customer experiences. The platform should be reliable throughout the organization, with clear and consistent mapping across all data sources and unique identifiers for customers, product lines, and other critical business input.

² Financial data could include historical spending, prices, and loyalty-program-redemption behavior, for example.

2. Predictive customer scores

The company develops analytics—often using several types of machine-learning algorithms—to understand and track what is influencing customer satisfaction and business performance, and to detect specific events in customer journeys.

The algorithms generate predictive scores for each customer based on journey features. These scores allow the company to predict individual customer satisfaction and value outcomes such as revenue, loyalty, and cost to serve. More broadly, they allow CX leaders to assess the ROI for particular CX investments and directly tie CX initiatives to business outcomes.

3. Action and insight engine

Information, insights, and suggestions are shared with a broad set of employees (including frontline agents) and tools (such as customer-relationship-management platforms) through an application-programming-interface (API) layer. For example, agents can receive alerts and notifications about the actions they should take to personalize customer experiences and improve CX outcomes. The API layer serves as a single source of truth, fueling recommendation engines based on both the data lake and customer scores. Importantly, the predictive platform, unlike survey-based systems, delivers timely insights and spurs swift action, both by employees and through digital interfaces.

Predictive CX platforms allow companies to better measure and manage their CX performance; they also inform and improve strategic decision making. These systems make it possible for CX leaders to create an accurate and quantified view of the factors that are propelling customer experience and business performance, and they become the foundation to link CX to value and to build clear business cases for CX improvement. They also create a holistic view of the satisfaction and value potential of every customer that can be acted upon in near real time. Leaders who have built such systems are creating substantial value through a wide array of applications across performance management, strategic planning, and real-time customer engagement.

One leading credit-card company wanted to adopt a more omnichannel strategy and boost its performance in digital channels. It focused on building a CX data and analytics stack to systematically identify, improve, and track the factors influencing customer satisfaction and business performance across 13 priority journeys. It started by gathering interaction, transaction, and customer-profile data with a journey analytics platform to identify drivers of satisfaction for each journey, as well as areas where it could improve. The platform included data on repeat interactions, lead times, and how often customers hopped from one channel to another. It also encompassed more subtle factors, such as whether the company effectively handled negative outcomes and what communications took place at various points in time.

This analytics-driven approach gave the company a quantified and systematic view into the problems, opportunity areas, and channel interactions across millions of customers, enabling the organization to support a systematic journey-improvement cycle. The team used the analytics platform to focus its investments and operational efforts on the journeys and specific moments that made a difference for customers, and it ultimately reduced its interaction and operational costs by 10 to 25 percent as a result of the CX and digital transformation.

Prioritizing CX efforts through intentional strategic planning is another promising use case for data-driven systems that allow CX leaders to understand which operational, customer, and financial factors are creating systemic issues or opportunities over time. One US healthcare payer, for example, built a “journey lake” to determine how to improve its customer care. The journey lake syncs four billion records across nine systems, spanning marketing, operations, sales, digital, and IoT. The resulting holistic customer view enabled the organization to identify operational break points—thresholds where patients often ask to speak with a supervisor or move to another channel to resolve an issue—and proactively reach out to patients through the website, emails, and outbound calls to settle the problem. It also used the data to develop a smarter digital migration strategy, targeting customers who had minimal engagement on digital channels and coaching them to use more self-service functions. The organization substantially increased digital adoption by focusing on the most significant pain points, such as prescription renewals; it reduced its costs by decreasing (by more than a quarter) the frequency with which customers turned to other channels after starting with digital.

Finally, thanks to the near-real-time nature of analytical insights, these new systems create a platform for proactive daily customer engagement. One leading airline built a machine-learning system based on 1,500 customer, operations, and financial variables to measure both satisfaction and predicted revenue for its more than 100 million customers every day. The system allowed the airline to identify and prioritize those customers whose relationships were most at risk because of a delay or cancellation and offer them personalized compensation to save the relationship and reduce customer defection on high-priority routes. A combined team of about 12 to 15 data scientists, CX experts, and external partners worked together for about three months to build the system and lead this first application, which resulted in an 800 percent uplift in satisfaction and a 60 percent reduction in churn for priority customers.

How to turn data into insight and action

The transition to predictive insight will not take place overnight. As our research shows, most organizations still rely on surveys to gauge customer sentiment. Leaders now have the opportunity to take their CX programs to the next level—starting from where their organizations are now. Based on our research on organizations that have successfully made the transition, we have identified four key steps to jump-start such CX transformations.

1. Work on changing mindsets: The transition will inevitably involve challenges, not least of which will be a mindset shift for both teams and CX executives. Leaders may feel that predictive systems are outside their purview, the domain of the IT department or a data-science team. But times are changing, and today’s CX leaders need to focus on data as they once zeroed in on a single CX score. Some may point to the fact that their organization has already done regression analysis on a few key performance indicators. It’s time to think bigger and bolder, and to build a system—not dabble in data.

The role of the CX leader is evolving, which means that executives will need to reposition themselves within their organizations. When asked about the biggest challenge with the current system, one chief experience officer responded: “People associate CX with marketing, not technology.” That is changing as more and more

companies take up predictive analytics, and it's up to CX leaders to help encourage the change in perception.

2. Break down silos and build cross-functional teams: CX functions often fall into the trap of creating their own silos within a company. To begin the transition, CX leaders need to better integrate with the rest of the organization.

Data owners will inevitably span operations, marketing, finance, and technology functions, so convening across senior leadership will be vital to ensure efficient data access and management. (And, of course, data scientists—not CX professionals—will be the ones writing the algorithms.) The CX team should define direction and strategy, but ensuring buy-in and excitement among the affected stakeholders will be key to scaling impact.

One travel-industry client, for example, began its data-driven system with a focus on delivering real-time enhancements to its customer-service operation because the CX team had a strong partnership with the service organization and could prove value quickly. The initial effort involved close collaboration: CX acted as the business owner, the data-science team developed the product, and the customer-service organization acted as the first recipient of an initial minimum viable product. Outside the core team, an advisory board including the COO, CFO, and chief marketing officer stayed informed of the progress and advised on future use cases so that when the initial pilot was successful, the COO was already on board for an additional use case in his organization. Even in the case of smaller-scale initiatives—for example, where an organization hires contractors rather than standing up an in-house data-science team—these strong, cross-functional relationships at both the development and steering-committee level will be vital to creating and scaling the CX insight engines of the future.

3. Start with a core journey data set and build to improve accuracy: Most organizations face challenges with data quality and availability—and without data, this transition is a nonstarter. The good news is that organizations can get started with basic customer-level data, even if the data are not perfect. The first step is to collect individual customer-level operational and financial data. A combination of customer profiles, along with digital and analog interactions, is usually a solid jumping-off point.

Teams should create a detailed journey taxonomy, including all the potential drivers of satisfaction for their customer base. The taxonomy can be used for hypothesis generation, leading to new measurable attributes for inclusion in the predictive model. These attributes—called data features in machine learning—can range from numeric properties, such as a customer's annual spend, to binary properties, such as whether the customer purchased a product online or in a store. Over time, understanding which features are significant in the machine-learning model—and comparing those with the team's hypotheses—can help organizations to recognize where data may be inaccurate or incomplete and to adapt their data-acquisition strategy accordingly. If data for certain features do not exist, teams can explore options to acquire new data sets (for example, credit-agency data) or apply new instrumentation to generate required features (for example, IoT sensors to map customer interaction points in physical environments). As the machine-learning algorithm ingests more data and generates its own insights, the data sets will become more robust—proving useful across multiple enterprise applications.

Ultimately, companies can look to integrate data from sources across the customer journey, including chat, calls, emails, social media, apps, and IoT devices. Regardless of the source, all data collection, storage, and use should follow privacy and cybersecurity best practices. (Notably, our colleagues have found that customer-data protection can serve as a source of competitive advantage as consumers become more careful about sharing data and avoid or stop doing business with companies whose data-security practices they don't trust.) Organizations should follow regional data regulations and remove any variables related to protected classes, such as race and religion. All identifying information should be encrypted and anonymized before it is analyzed. Finally, regular risk reviews can help detect algorithmic bias in CX systems. CX leaders are responsible for knowing what their organizations are doing to protect customer data, mitigate bias, and promote fairness in their predictive systems.

4. Focus first on the use cases that can drive quick value: Data-driven, predictive systems offer CX organizations a unique opportunity to tie CX strategies to tangible business value. In the early days, it is important to have a clear view for how the insights will be applied and to focus on a few specific use cases that will create immediate return. As a simple framework, organizations can review major sources of opportunity, pain points, or both across existing customer journeys and think through how a predictive system might create new solutions or enhance existing ones that may have a direct impact on loyalty, cost to serve, cross-sell, and up-sell behaviors.

For example, one company applied its predictive system to its issue-resolution journey after realizing that its contingency funds—which had previously been allocated uniformly across customers—could be applied more strategically. The company developed an algorithm that could identify high-priority customers as measured by lifetime value and recent experiences (such as the extent of delayed service the customer had experienced in the past month), and it used the algorithm to allocate contingency funds toward dissatisfied, high-value customers. This first use case proved successful, saving the organization more than 25 percent of its planned budget and paving the way for future applications. Leaders should ask themselves what use cases present a clear opportunity to drive value through a proof of concept so they can build momentum and gain support.

After years of serving as the benchmark for defining and refining a company's customer-experience performance, survey-based systems are heading toward their twilight. The future of superior customer-experience performance is moving to data-driven, predictive systems, and competitive advantages are in store for companies that can better understand what their customers want and need. Q

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