



FORGING THE FUTURE  
of CUSTOMER  
EXPERIENCE



**BUILDING A UNIFIED DATA  
FOUNDATION FOR TURNING  
CUSTOMER INSIGHT INTO ACTION**



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## INTRODUCTION

**The rise of the data-driven marketer has propelled the marketing function beyond the role of brand promoter-in-chief and into a customer experience and growth-driving champion. In a CMO Council global marketer survey, when ranking who marketers felt was primarily responsible for driving growth strategies and revenue generation, marketers ranked themselves first, even above the CEO.**

But it's not just the CMO who recognizes this mandate. In that same study, 91% of marketers said that there was an expectation by senior management and board members that marketers drive measurable growth, with one in three saying that their business leaders felt that driving measurable growth was the primary mandate of marketers today.

They have no doubts about what it will take to drive that growth. The number one tactic marketers felt would solidify their position as growth driver was to more effectively leverage data insights to drive strategic activities. Ranking second was embracing new digital marketing and customer engagement technologies to improve ROI. In other words, success all comes down to leveraging data effectively.

Failure to succeed comes at a steep price. Recent CMO Council research highlights that 76% of senior marketing leaders feel their jobs could be on the line if customer experience (CX) strategies fail to deliver profitable results. Making this an even starker admission was that 77% of CMOs admitted they were yet to realize the full revenue potential of today's connected customer.

As the owner of CX, marketers recognize that to truly elevate CX they must move beyond gut-driven activities and towards data-driven campaigns with measurable outcomes that determine and define success. They recognize that data is the key to their success.

But how far have they really come in delivering on those data-driven dreams?

The CMO Council asked marketers to rate their organization's overall access to customer data that is relevant to their function. Less than one in five felt relevant data was highly accessible, with 36% saying it was fairly accessible but lacked real-time capabilities and often required manual processes. Another 32% said data insights were hit or miss, with access varying wildly across functions and with little reliability to access.



**The main challenges marketing leaders identified to realizing greater value from internal data assets were:**



**Gaps in technology**  
systems that fail to connect data into a single customer view



**Inaccessible data**  
trapped in individual touchpoints and platforms



**Team lacks skills**  
to fully unlock data and apply intelligence

Overcoming these obstacles leads to significant payoff. Those marketers believed that leveraging data more effectively would lead to engagements and organizations that are more collaborative, customer centric, efficient, connected, responsive and profitable.

The mandate to solve the data-driven CX enigma has only increased as data assets become more robust and fickle customers stand ready to defect if their expectations are not met. Marketers realize that in order to truly impact CX, they must reach across the aisle and ensure there is a cohesive experience and data story across all relevant functional touchpoints in the organization.

More than this, they need to hone in on operationalizing their data assets. In 2018, 56% of marketers surveyed by the CMO Council said their organization had already invested in tools to aggregate, manage or analyze data, with another 20% saying they were planning to do so within the next year. The next frontier is for organizations to move from collecting insights to bridging the gap from insights to action.

This report takes a look at how marketing leaders today are approaching the data conundrum. It covers the data landscape from insights to action and uncovers the organizational allies that are required to make the most out of those data assets.

Marketers have plenty of data, but it's leveraging that data in real-time across channels and organizational touchpoints in a way that feels personal, relevant and even anticipatory. This is the marketer's mandate today.



## KEY FINDINGS

### THE ROAD TO A DATA-SAVVY MARKETING ORGANIZATION

Let's be clear: No one has mastered the data conundrum... yet. The vast majority of brands aren't even close. Nearly 60% of marketers point to inconsistencies with the level of depth and granularity of customer insights, while a shocking 36% admit they just don't have the data to know their consumers, let alone anticipate their needs, according to a recent CMO Council survey.

This is especially concerning because today's connected consumer expects a personalized experience optimized across channels. Marketers must effectively connect the dots of the customer journey across channels and touchpoints to not only understand what their customers have done, but what they are likely to do.

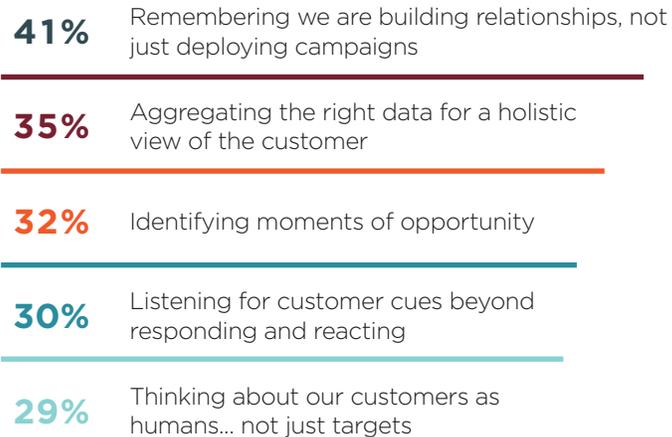
"The holy grail is for companies to become anticipatory," says Keyur Desai, former chief data officer at TD Ameritrade. "If you're postured that way as a company, it's actually much cheaper to operate than being reactive."

Marketers recognize that this anticipatory stance is no longer a "nice-to-have;" it is an imperative. Recent CMO Council research found that 61% of marketers say they own the overarching customer engagement strategy; 59% see themselves as visionaries for opportunities to innovate and better serve the customer; and 55% claim they're collectors of critical intelligence about customers and their needs.

Yet at the same time, they admit they struggle with creating meaningful relationships with their customers. Worse, many admit in their eagerness to deploy campaigns they often forget about the individual behind those campaigns. In other words, while they recognize the need for a data-driven CX, they fail to leverage those insights to inspire meaningful, relevant actions.

#### Greatest Relationship-Building Challenges

Source: Bringing a Human Voice to Customer Choice, CMO Council





Optimizing to become data-driven requires much more than gaining insights on how customers use products. It's not about grouping buyers into broad personas. If you're merely collecting demographic data and analyzing purchase histories, you're not even scratching the surface.

**“ We have to go deeper. The most powerful insights are truly getting to the personal motivations. It may be about advancing in your job or being seen as an expert among your peers or bringing artificial intelligence into your company.”**

- Mike Marcellin, chief marketing officer, Juniper Networks

“We have to go deeper,” says CEO Mike Marcellin of Juniper Networks. “The most powerful insights are truly getting to the personal motivations. It may be about advancing in your job or being seen as an expert among your peers or bringing artificial intelligence into your company.”

Understanding what motivates people is the first step toward anticipating their behavior and truly delivering value. Of course, this requires capturing a lot of customer interactions on the frontlines. And that doesn't just mean insights gathered through marketing touchpoints; there is relevant data captured across distinct business units that is necessary to complete the full picture.

Today's user journey includes interactions across both in-person and digital environments, across multiple devices, and typically touching a handful of distinct channels. Users also interact with distinct teams depending on where they are in their journey, whether that be a salesperson at the front end or a customer service representative when things go wrong. The data-savvy marketer knows that none of this data can be ignored. To truly reach their customer, they must take a step back and view the picture in its entirety.

Optimizing the enterprise to be both data-driven and customer-centric won't happen overnight. Every organization is at a different place in this journey. Those critical steps need to be taken thoroughly, with intention, and with the ultimate goal at the forefront: to create real value by leveraging data to more intelligently connect with customers and reach them in their moment of need.



To this end, we have identified

## FOUR KEY STEPS IN THIS JOURNEY:

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### STEP 1 | **INTEGRATE CUSTOMER DATA**

Unify your customer data set. This is not a job to be tackled solely by Marketing or IT. Customer data comes from multiple departments and systems, and therefore requires an enterprise strategy and approach based on pooled investments and sharing of data across departments. The enterprise strategy must reflect the diverse needs and requirements of key stakeholders with varying levels of skill, service-level-agreements, and standards for quality and completeness.

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### STEP 2 | **SCALE CUSTOMER INSIGHTS**

Turn data building blocks into customer insights. The impact of customer insights come from thousands of models sensing and reacting to customer opportunities and pain points. This requires multiple analytic techniques, particularly newer forms of analytics that have recently matured, such as machine learning, journey mapping, and sentiment analysis. In order to scale analytic insights, the tools must support a broad range of users from coders (data scientists) to clickers (most marketers).

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### STEP 3 | **TURN INSIGHTS INTO ACTIONS**

Relentlessly remove friction that exists between creating customer insights and doing something with that information. Move from antiquated list pulls to capabilities that support autonomous decision making and cross-channel coordination. Move from insights delivered through email and ads to include experiences delivered through connected products and devices.

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### STEP 4 | **BUILD THE CX CULTURE**

Foster a collaborative data-sharing culture by focusing on a shared set of business priorities as the linchpin to justify cross-functional collaboration around customer experience. Ensure frontline workers in the trenches are empowered to leverage data by making data more accessible and readable for each unique set of functional requirements and priorities. Understand the unique motivators of your cross-functional partners and how data insights can be leveraged to advance activities in other areas of the business.



## STEP 1 INTEGRATE CUSTOMER DATA

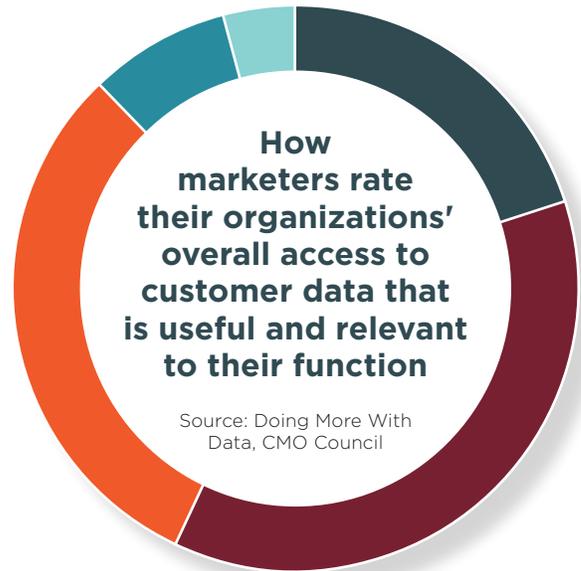
It all starts with the data ecosystem, which should include a unified data infrastructure, governance over the data supply chain, and critical data assets. A fast and efficient data ecosystem supports integration and collation of data in near-real-time, bringing speed into the data platform. Without this, it's impossible to develop data-driven customer intuitiveness.

“We need to better understand the data supply chain in order to make data governance successful,” Desai says. “This will allow us to create a data foundation that sees trusted data to analyze and uses artificial intelligence models to get predictive.”

Yet, this is a massive barrier to overcome.

Few companies have a unified data infrastructure providing a single source of truth, rather they struggle against the proliferation of data silos sprouting up like weeds. These data silos are often found in multiple technology stacks, cloud platforms, departments and customer facing channels with varying levels of data quality.

Then there are the data assets themselves. Only one in five marketers feel they have relevant data sources that are highly accessible, with 68% saying relevant data was only fairly accessible or “hit or miss,” with reliability of data access varying wildly depending on the source.



**4%**

**Highly inaccessible:**

Access to data anywhere in the organization, including our own systems and platforms, feels impossible and is time consuming

**8%**

**Fairly inaccessible:**

Accessing data outside of an individual system or department is difficult but can often be achieved by manual export or with support from IT

**20%**

**Highly accessible:** Real-time access to all relevant points of customer insight and data from across the entire organization as well as external partners and third parties

**31%**

**Hit or miss:**

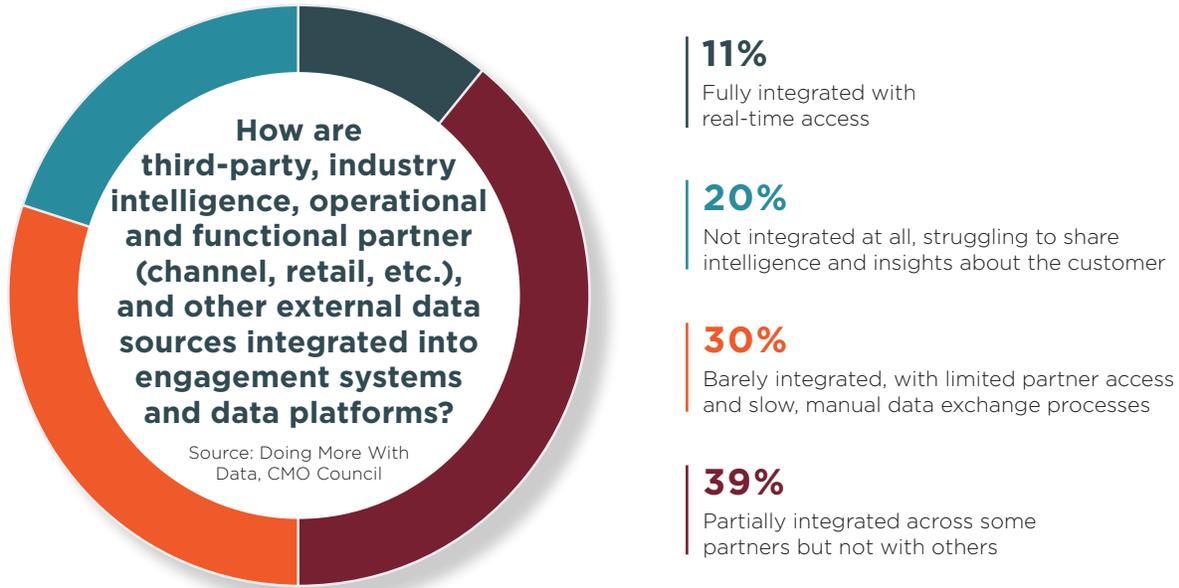
Access to data varies wildly across various functions, partners or third parties, with little reliability to access

**37%**

**Fairly accessible:** Access to multiple pools of data across the organization, with some access to external partners and third parties, but not all points of access are in real time, and some require manual exports or IT assistance



Companies should be striking up partnerships with second-party and third-party data providers to get a more complete picture. Then they must properly integrate that data into their own systems, something that only 11% of marketers surveyed by the CMO Council feel they have successfully done with real-time access.



Sebastian DiGrande, former former chief customer officer at Gap, spent nearly two years increasing the number of data sources from a couple to a dozen, which gave him a better sense of what customers wanted. This led to the creation of a successful loyalty program that provides customers with benefits they were actually seeking.

“It really never ends,” DiGrande says. “You need to have a very clear strategy for creating a single view of the customer across all data sources, not just transactional data but anything you can glean around customer behavior.”

To learn about the motivations driving customer behavior, it is important to rely on qualitative data along with behavioral and transactional data. This is where traditional qualitative research comes in. Juniper Networks, for instance, has online focus groups to test insights and shape everything from product roadmaps to marketing messages to inorganic opportunities.

**From technology gaps, to data silos, to lack of skills—overcoming the data conundrum is not an easy task. In a survey, the CMO Council found the biggest obstacles to realizing greater value from internal data assets were as follows:**

- 56%** of marketers cite gaps in technology systems that fail to connect data in a single customer view
- 51%** cite inaccessible data trapped in individual touch points and platforms
- 51%** cite teams lacking skills to fully unlock data and apply intelligence
- 41%** cite lack of standardized data so that all inputs work together
- 38%** cite lack of budget to bring in the right teams and technologies



Marketers hold some culpability in the proliferation of data silos. As data sources and volumes began to increase, marketers abandoned the traditional data warehouse approach since it required too much reliance on IT. After all, IT often became a bottleneck with its demands for detailed business requirements, strict controls for governance, and long planning cycles.

Marketers started investing in technology to harness customer data outside of the purview of IT to increase agility and flexibility around customer data management.

**“As new data sources emerged, they were often siloed within marketing rather than integrated, created a complex MarTech ecosystem and a disjointed customer experience.”**

- Chad Meley, vice president of solutions marketing at Teradata

“As new data sources emerged, they were often siloed within marketing rather than integrated,” says Chad Meley, vice president of solutions marketing at Teradata. “Web data went into the web analytics application. Social media data went into the social listening tool. Mobile data went somewhere else. This created a complex MarTech ecosystem and a disjointed customer experience.”

Data is also coming from new digital sources: not just web and mobile, but kiosks, chatbots, ATMs, wearables, and telemetry from the product. And of course, each industry has its own data indicators to consider. If you are a telco, customer data is every dropped call and weak signal. For automotive, it's driving patterns and features used, and increasingly getting predictive about things like whether your car won't start next week due to sensor readings. If you are in entertainment, it's the shows customers are watching, stopping, saving and discarding. In video games, it is every milestone achieved, time played or struggles with tutorials.

Marketing is not keeping up with the proliferation of customer data. And it's getting worse.

So how can companies speed things up? They should adopt a model where professional data integrators in IT and citizen data integrators in the business collaborate rather than compete. There are times when business users need self-service capabilities to find customer data, prepare the data for analytics, apply analytics and share insights. That model should be supported by an institutionalized data management framework, which covers the acquisition, rationalization, governance and delivery of core customer experience data.

“Customer-centric big data sets that are at petabyte scale like streaming data in entertainment, connected car data in automotive, call telemetry data in communications, EMR data in healthcare, are simply outside the competencies of a citizen data integrator to manage and cost prohibitive to take a parochial approach to storing,” Meley warns. “These problems are further exacerbated by increased focus on customer data privacy and security through legislation such as GDPR and CCPA.”



And certainly, there needs to be a governance model in place that accounts for different approaches to data management from different functional teams.

Poor data quality can be particularly vexing. If you're matching segment parameters and pulling data from two pools, you might have a 25% drop in confidence levels, meaning your assumptions can't be trusted without third-party verification—and that's unlikely.

"You have to have a consolidated view of all your customer data," Marcellin says. "This is the only way you can tap into correlations to test potential insights."

Data quality requires constant vigilance. Not only should companies assess data quality and eliminate bad data in existing data assets, they need to be screening data flows in real-time. There should be a notification system to catch bad data before it corrupts the data supply chain.

The problem lies in data governance, or lack thereof. Poor data governance leads to reactionary thinking, which in today's environment simply won't cut it. It also can be highly ineffective given the time it takes to identify the right sources, monitor data quality and resolve data-quality issues.

"Often, information is inaccurate because of bad data," Desai says. "The amount of time it takes to perform analytics and deliver an answer takes too long, and so you're pretty much forced into making a gut-based decision."

In order to solve this problem, brands need to understand the data supply chain and apply better data governance. The goal, Desai says, is to become proactive in identifying the right data sources, monitoring data quality and resolving data issues quickly. "We've got to get data governance to become anticipatory," Desai says. "You have to anticipate your data problems if you're going to be anticipating your customer posture."

The other piece of this: delivering insights to business leaders before they have to make a decision, not as validation after the decision has already been made. It's all about speed in the data supply chain.

Truth is, most corporations today don't understand their data supply chain. Analysts who create reports, for instance, don't realize they may be going to an inaccurate source. Or they may be getting customer segments from a legacy system that isn't the system of record.

Most companies can't lead with data and analytics because they have a fractured data foundation, insufficient or bad data, and a poor understanding of the data supply chain. The CMO Council found that seven out of 10 marketing leaders are not satisfied with the quality, timeliness and usefulness of decision support data. To even begin to fulfill CX dreams, establishing a strong data foundation is paramount.



## STEP 2 | SCALE CUSTOMER INSIGHTS

Once a strong data foundation is set, proper data governance and real-time integration of data sets across functions will provide those data building blocks that marketers can then use to really build their customer personas and understand those individual drivers and preferences.

For Chris Curtin, chief brand and innovation marketing officer at Visa, any use of data should be controlled by the end user and needs to provide real value and enrichment to customers' lives. "Customers should believe that the data they are sharing is leading companies to a better understanding of them. As marketers, we need to think about using data in ways that make our customers believe they are the net beneficiary, not the company."

While building customer insights is certainly top of mind for marketers, when it comes down to it, marketers admit they struggle to listen to behavioral signals and cues from customers.

Given their daily interactions with customers, marketers have sharpened their human intuition about customers—just not in a data-driven way. This personal engagement can help test and confirm data-driven insights.



### 4% Exceptional

The organization is able to listen in real time.

### 39% Fairly good

We are able to aggregate intelligence in some channels but struggle in others.

### 33% Just okay

We can listen, but we don't necessarily understand their wants or needs based on what we hear from them.

### 17% Not very good

We hear more noise than we pinpoint signals and direction.

### 7% Terrible

We fail to listen to our customers and instead make lots of assumptions.



“Truly understanding your customer goes beyond systems and data,” says Govind Avasarla, vice president and head of enterprise marketing at Vodafone Idea Limited, India. “Marketing leaders being in direct touch with customers is a good way to validate the steps and journey.”

*Only 3 % of  
marketers believe  
their organization is  
exceptionally effective  
in turning data and  
intelligence into action.*

Marcellin of Juniper Networks agrees. For him, aggregating the data from abundant sources is not the problem. The trick is to assemble these building blocks into true insights.

To this end, Marcellin says he’s found two successful approaches: use a data science team to correlate data and test marketing’s hypothesis or complement digital data with traditional qualitative research, such as online focus groups.

“Knowing their why helps provide context to what they say and what the data is telling us,” Marcellin says.

“There’s demographic data, behavioral data and trigger data. If you can take those three pieces, you can start to put together more persona-based forecasting. You can take new customers and put them in segments similar to others, and then use the models for that segment to understand what they may do.”

The payoff can be significant, he says. The right insights will make everything marketing does better. Events will be more engaging, content more relevant. New automated MarTech tools could also let you create a customer-driven buying journey that looks different than any other traditional buyer’s journey.

“The dream would be to automate the entire buyer’s journey while seamlessly allowing for human touch when desired,” Marcellin says. “It would radically change the roles of sales and marketing in the future and radically improve the buying process in customers’ eyes.”

Unfortunately, most companies have things in reverse. They rely on human intuition for hunches about what customers will do next, only to bring in data and analytics afterward to see if those hunches were correct.

Enterprises need to embrace the revolution in newer forms of analytics that have emerged over recent years. Today, it has become much more efficient and practical to deploy machine and deep learning, pathing to map customer journeys, and sentiment analysis. A decade ago, these insights were the domain of West Coast Digital natives, and most marketers were too intimidated to approach these new data assets without a data scientist to help them sort through the noise.



But today, marketers are realizing that they indeed have the data, processing power and self-service, no-code analytic tools to really turn those data assets into real customer insights. Machine learning, for example, allows CX professionals to set a goal, such as to minimize churn or increase product attach rate. The machine learning algorithm can then continue to learn and self-optimize to converge on the optimal customer treatments.

Pathing, or journey mapping, lays out the antecedent events that preceded events of interest. This allows organizations to see why customers are churning, or what sequence of events lead a customer to call into the call center for help. And sentiment data via text or voice, which used to be intractable data sets, now offer a wealth of insights by turning social posts, call center notes, ratings and reviews into actionable insights. The key is to put these analytic capabilities into the hands of business users with CX acumen and remit.

Here's a familiar scenario: A marketer wants customer insights on where to target and puts in a request to the IT department. The IT department schedules the request behind a long list of others. Depending on the technology infrastructure, it might take a while to perform the analytics. And the marketer gets the insight two or three months later.

“ *There's demographic data, behavioral data and trigger data. If you can take those three pieces, you can start to put together more persona-based forecasting.*”

- Mike Marcellin, chief marketing officer, Juniper Networks

“That's not an anticipatory stance,” Desai says. “They have to make a decision tomorrow, and so they're forced into making a gut-based decision.”

It's really a difference of priorities. In truth, DiGrande says too many change agents are naive when it comes to gaining executive buy-in.

Data-savvy marketing organizations don't rely on a big bang, episodic insight. They know that opportunities and pain points are everywhere, necessitating thousands of

algorithms deployed to sense and react. While data scientists are an important part of customer insight strategy, enterprises also need to put powerful analytic tools into the hands of more non-technical business users. There is simply too much work to be done to expect to come exclusively from the scare pool of data scientists. This allows thousands of flowers to bloom.

Ultimately, an organization's data platform needs to serve all types of analysts, from data scientists using program languages like Python, to power analysts fluent in advanced SQL, to business users who are clickers rather than coders. If each user persona has their own customer data platform, then the organization hasn't solved the issues highlighted in step one.



### STEP 3 | TURN INSIGHTS INTO ACTIONS

“Understanding a few breakthrough insights about your customer can allow you to engage with them in differentiated ways, allowing marketing to drive separation from competitors,” Marcellin says. “This is marketing’s ticket to be a more strategic function.”

But if aggregating customer insights is a challenge for CMOs, acting on customer data insights in the customer’s moment of need is even more problematic. Shockingly, the CMO Council found that only 3% of marketers believe their organization is exceptionally effective in turning data and intelligence into actions.

Delays in insight gathering can mean the difference between failure and success. DiGrande says a robust data environment could provide the global retailer with insights into when a certain trend is going to hit, the amplitude of the curve, color schemes and materials. The successful gathering of those insights would allow the marketer to influence the acceleration of the curve to match its assortment planning and merchandising.

“*The starting point of any decision is really delivering and exceeding customer expectations.*”

- Boon Lai, vice president of global partner marketing, Cisco

Being able to inform forecasting, planning and buying of products can lead to a massive payoff in a product business. “It’s a balancing act. You miss a trend, you’re behind on a trend, you hold onto a trend too long, and you can lose a tremendous amount of money. Being able to leverage customer data to inform the upstream components of the business beyond purely downstream customer-facing marketing activity is the second-order benefit that pays enormous dividends,” DiGrande says.

Everything comes down to predicting a trend faster than competitors. DiGrande says the ideal scenario would be to effectively listen in on Facebook and Instagram chatter, analyze influencer tone, factor in weather forecasts, and anticipate the next trend for, say, off-the-shoulder tops.

“Those types of things allow you to be more predictive, and that’s how you’re going to leave everyone in the dust,” DiGrande says. “It would be game-changers for the industry and drive tremendous value creation for those who have cracked the code.”

There are many instances where data can help marketers be more proactive. From marketing journeys to service journeys to payment journeys, there’s always opportunities to give special offers, reduce friction or solve problems. That’s the stuff that engenders trust and builds loyalty. “If you truly want to unleash value for your customers, you need to anticipate and fulfill their needs in a whole different way. This is how you become a loved brand,” Scott McAllister, former senior vice president of digital customer experience transformation at Comcast Cable says.



For example, data driven banks are now continuously monitoring the steps of the lengthy, cross-channel mortgage application process to spot and rectify drop out points. One bank found a problem with the online mortgage calculator that was frustrating customers, while another now follows up with helpful, relevant tips and support when clients struggle to complete a particular stage in an expected timeframe. Most companies work hard to identify angry customers and appease them with discounts and freebies. But real customer intuition wards off problems before they become an issue.

“*Understanding a few breakthrough insights about your customer can allow you to engage with them in differentiated ways, allowing marketing to drive separation from competitors. This is marketing’s ticket to be a more strategic function.*”

- Mike Marcellin, chief marketing officer, Juniper Networks

Customer intuitiveness doesn’t have to be titillating. In many cases, it can be about anticipating when a customer is about to leave you and then doing something to prevent it. In others, listening to the right cues can help a marketer respond and react quickly, even if it is slightly reactionary.

McAllister says getting ahead of the customer comes by gathering all the disparate data pieces, striking up third-party data partnerships, distilling multiple versions of truth, and, critically, piecing together demographic data, behavioral data and trigger data.

“If you take those three pieces, you can start to put together more persona-based forecasting,” McAllister says. “So for example, if someone goes onto a service provider’s website, and their browsing behavior indicates they’ve just moved residences, it will trigger a new customer experience, complete with offers and discounts tailored toward a mover.”

“Sure, it’s a little reactive,” McAllister says. “But there’s a fine line of creepiness. You don’t want to look like you’re watching and anticipating when it looks like someone is going to move.”

Still, the body of offerings and insights tailored towards the mover’s needs—particularly during such a stressful time—amplifies the customer experience, reduces friction by taking the “thinking” out of what movers need to research or what services might benefit them, and ultimately, turns the brand into a trusted resource.

“It’s about having a complete view of that entire customer’s interactions with you, insights from partner data sources and data available in the public domain, and bringing all that together to be able to sense and respond to what the customer is likely going to do next,” Desai says.



This is especially important as “near real-time” is quickly becoming “too late.” This means that marketers need capabilities to detect opportunities and decide the next best action while the customer is digitally engaged with the organization. If your customer has expressed an interest or intent on the web, the opportunity to capitalize on that and create a meaningful experience is often quickly perishable.

While a signal, such as a competitive offer, helps companies to be anticipatory, they still need to act quickly before the customer leaves. Herein lies the rub. The pursuit of customer intuition often falls flat in the time gap from insight to action—that is, companies miss the moment.

“Getting ideas and insights is not the problem,” Balaji says. “The ability to churn this fast enough to execute on insights in a timely manner is my challenge.”

“The starting point of any decision is really delivering and exceeding customer expectations,” says Boon Lai, vice president of global partner marketing at Cisco.

A year ago, Cisco launched a pilot project with one of its systems integrator partners, WWT, to leverage customer data, web browsing behavior and machine learning in order to deliver a more personalized experience. The project called for analyzing data to be responsive to the customer’s needs and present the customer with the right offer based on where they were in their buying journey—all in real-time.

Those efforts are paying off today, especially as customer expectations move not only from real-time engagement but a close-to-real-time purchase-to-use journey. These efforts require alignment not just across marketing, but across commerce, supply chain, product teams and many other internal stakeholders.

“Everything is digital now, and our customer expectations have changed,” Lai says. “They come to Cisco.com looking for Webex solutions for working at home and want to be able to buy and use it right away.”

At Visa, the drive to provide a seamless experience for customers has the company looking at innovative ways to get ahead of customer needs. “Imagine an intelligent refrigerator that can effectively pinpoint when your milk has gone bad. That fridge can then present an opportunity not just to purchase, but to have the milk delivered to their home. By reading a bar code, the fridge is able to determine a shelf life of a given product, and then submit an offering to purchase that product and get it delivered. That seamless interaction removes friction from your life. That’s the ultimate goal of data usage,” Curtin says.

At the same time, Visa is integrating secure payments into the planning process, as security in IoT payments presents a whole new ball game for financial services in terms of protecting those data assets. So while Visa works on the aspirational partnerships to bring the intelligent fridge to life, it’s also working on things like tokenization services—technology designed so you don’t have to store sensitive card information into IoT devices. For example, a token could be granted to the fridge to only order specific products from a particular store.

That’s data usage that really provides value and makes customers feel secure.



## STEP 4 BUILD THE CX CULTURE

To truly elevate the customer experience and get to a place where real-time is the norm and anticipatory actions are increasingly possible, marketers cannot go it alone. Indeed, the modern customer leaves their data footprint all over the place; marketers would be remiss not to pull in all CX stakeholders across the organization to foster this journey together.

Yet oftentimes, marketers focus on customer experience metrics that only apply to the marketing function. Likewise, each functional silo has a tendency to analyze data only that is relevant to their function, without tying together the myriad of pieces that form the customer experience today. Marketers that are really moving the needle in CX are those that are starting to have very different conversations with their colleagues in other departments.

“Cross-functional collaboration is a critical linchpin when it comes to advancing the data-driven customer experience,” says Nicole France, vice president and principal analyst at Constellation Research. “You don’t achieve success magically by putting the right tools in place. Those tools are not going to resolve communication and coordination issues. What truly moves the needle

“ *What truly moves the needle is when there is a substantive conversation across departments that is focused on driving outcomes that matter.*”

- Nicole France, vice president and principal analyst at Constellation Research

is when there is a substantive conversation across departments that is focused on driving outcomes that matter.”

Indeed, data can only facilitate a wider set of objectives when everyone is clear on what those objectives are; and is held responsible to work collectively towards those outcomes.

“Just building a data platform is not the answer,” says France. “It’s a critical element of getting to that answer. But the real issue becomes understanding what data you need and what forms of analysis are needed. The only way to be effective is to break down the pieces to start to focus on outlining the biggest priorities and the minimum components that must be put in place to give significant movement toward those objectives.”

Oftentimes, data is used to justify past actions, but if you have a culture that believes that data is somehow your “get out of blame” ticket, you are never going to be able to have that substantive conversation that really puts the customer at the center of the equation.

Instead, France suggests flipping the coin on its head. “Don’t come from a reactive place when it comes to data; rather, look at business priorities and outline how a unified view of the customer will help to achieve that goal. This might be improving profitability or top line revenue growth; it might be how to enter a new market or how to increase the amount of repeat business with



existing customers. Once you have a clear view of those priorities, it becomes a lot easier to justify the need for a unified view of customer data.”

A year ago, Mika Yamamoto, chief marketing and customer experience officer at F5 Networks, was charged to build a data platform and a spearhead a company-wide data transformation mandate.

The mandate called for gathering and analyzing customer data in order to create a 360-view of the customer, reduce churn and discover customer-engagement best practices. At the time, line-of-business executives were looking at their own data sets and acting independently.

“We really wanted to understand the entire customer relationship, not just what they bought but how they engaged with us,” Yamamoto says. “What were their satisfaction levels? How much did they invest with us compared to other companies their size?”

Yamamoto found that the challenges of filling the data platform, which took several quarters, and unearthing customer insights paled in comparison to the cultural hurdle. Senior executives needed to understand the merits of the 360-view of the customer. They weren’t used to looking across the portfolio and were stubborn about engaging with customers differently.

“Honestly, the biggest challenge I’ve had is education,” Yamamoto says. “We almost had to sell the benefits and value while we were still building the data platform. We needed to prioritize which use cases to throw against the data platform and provide that data to the rest of the company.”

There is clearly a very strong connection between positive and streamlined and consistent customer experiences and driving revenue and profitability effectively. But this goal will never be achieved without an understanding of that experience as it relates to all of the different functions of the business.

**In a CMO Council survey of marketing, supply chain, operations leaders and commerce leaders, some of the key areas that could help ensure cross-functional participation and contribution to the data value chain include:**

 <p>Sharing goals and metrics that define success</p>	 <p>Having a dedicated, centralized data team that aggregates and distributes relevant insights</p>	 <p>Fostering a corporate culture that values data and analytics as the core of business opportunity</p>	 <p>Investing in tools and technologies that empower collaboration</p>	 <p>Tying compensation directly to customer experience goals and outcomes</p>
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CFOs, for instance, require a sound business case, proof point, and perhaps testing before agreeing to fund a high-ticket project. Then the process starts again for funding to scale the project. At every step, a CFO is wondering if the project is cannibalizing some other use of the capital.



Interestingly, one of the reasons the default for enterprises is a bunch of customer data silos versus an enterprise customer data platform is that small silos fly under the radar with the CFO. Enterprise platforms get attention from CFO. The irony for the CFO is that adding up all the costs of the smaller silos with all their redundancies in copies of data, manpower, software and storage costs are much more in aggregate than having a shared platform.

CIOs are also notoriously difficult to convince. They hold the keys to capital allocation for technology and are often focused on legacy infrastructure, not new-fangled marketing tech projects. Without their due diligence, rogue projects can turn into a frankenstack and stall.

**“ Imagine an intelligent refrigerator  
that can effectively pinpoint when  
your milk has gone bad... then have  
the milk delivered to their home...  
That seamless interaction removes  
friction from your life. That’s the  
ultimate goal of data usage.”**

-Chris Curtin, chief brand and innovation marketing officer, Visa

Then there are the marketers themselves. Many fear the coming of data-driven, predictive customer insights as a replacement to their human intuition. “It’s hard for traditional marketers to understand that their job is changing significantly,” DiGrande says. “For those who don’t have those skills, it’s very threatening.”

Ultimately, machine learning and advanced analytics are moving beyond the scope of IT and firmly planting themselves in the realm of marketing. Rapid advancements in machine learning are allowing marketers to do sentiment analysis, journey mapping, and gain insights from previously intractable data sets like video, audio and images.

As data sources began to proliferate in the last decade or so, many organizations looked to data scientists to unlock the code to a superior CX. Liz Miller, vice president and principal analyst at Constellation Research says part of what makes data feel so scary to people today has been a self-fulfilling prophecy from C-suite leaders.

“In order to get the budget that we needed to go get the data platform and the data scientists that could help us make sense of data, adjust it and understand it, we needed to create a bit of an aura of fear of data. But now that we have the tools, we realize that data can be fun and, if organized properly, can be something that anyone, at any level of the organization, can leverage for CX,” says Miller.

“When we’re looking at any type of BI tool or any type of data tool, it is not enough that a data scientist be able to leverage the data. The mid-level marketing manager also needs to have access to a tool where she can configure and leverage data; where she can ask new questions,



and explore different avenues based on the data that's relevant for her. Data that is relevant to a data scientist versus a marketing manager are not the same. But they have to come from the same space, the same central repository."

The culture of data needs to move from the idea that data is something scary living in a swamp with IT overlords. "When the culture is structured in a way where data is controlled by IT, where it is only imagined or engineered by an analyst and then is parsed out so that each function you can figure out what to do with it, that's never going to be a culture in which customer experience can actually be a team sport," Miller underscores.

**“ I would love to put a sign up on a big wall, saying, ‘The reason why we have customer data is to help serve them better.’”**

- Suresh Balaji, regional head of marketing, HSBC

While the addition of the role of data scientists has certainly elevated data-driven capabilities, this is only truly effective if it comes hand-in-hand with a more centralized data-sharing model, where data scientists are analyzing disparate sources of data and sharing those insights back with the organization at large, but at the same time, teams are empowered to easily access and leverage insights that are key to their function.

France explains, "We talk a lot about the 'future of work' but we don't talk about the future of individual functions. Different people in different roles each have unique priorities, preferences and needs. We need to get to a point where we can anticipate which data assets are most valuable for each unique role. We need to create a culture in which it is okay to play in the sandbox and provide tools that lower the barriers to entry for that."

The real people enabling a cross-functional approach to customer experience are the people in the trenches. While senior-level sponsorship and air cover is necessary, this is not a top-down issue. Rather, a larger cultural change needs to happen, one in which organizations move away from a top-down management approach. This is especially critical because speed is so critical to succeed in today's environment. Upper-level management needs to provide a clear picture of the mission, and teams need to be empowered to act quickly. They have the tools, and if they can coordinate with their cross-functional partners they can make real change happen.

"The challenge we find in our organization is not just the data or the technology, but the opportunity to code the organization together to work a lot closer and be more integrated, cross-functionally, like never before," Lai says.

DiGrande advises that another way companies can take steps to shift the culture toward data-driven customer intuition is by making data-driven customer intuition metrics—such as acquisition, retention, loyalty and lifetime value—part of the bonus structure. It's also good to have a banner everyone can get behind.

"I would love to put a sign up on a big wall, saying, 'The reason why we have customer data is to help serve them better,'" Balaji says.



## CONCLUSION

On the road to a data savvy organization, no one has reached the final destination. While new advancements and innovations will always move that needle, the savvy marketer knows that they'll be left in the dust if they don't solve the data conundrum.

**And while nothing can be changed overnight, a few key points emerge as big takeaways from the study:**

### **MAKE CUSTOMER DATA AN ENTERPRISE—NOT DEPARTMENTAL—INITIATIVE**

Establish a unified data foundation with strong data governance to ensure trusted data flows through the data supply chain. Go beyond customer transactional data to gain insight into motivations by connecting behavioral and observational data.

### **DON'T UNDERESTIMATE CULTURAL HURDLES**

Expect backlash and plan for ways to shift the culture by creating more transparency across business units and establishing a single version of truth.

### **CREATE SPEED THROUGH A SELF-SERVICE MODEL IN CONJUNCTION WITH IT**

Consider adopting a self-service model to speed up the process between data, insights and action in a way that builds upon, not circumvents, an IT managed data platform.

# START CLEANING UP YOUR DATA HOUSE

Most brands suffer from a cluttered, messy data environment. It grows more unwieldy every day and is painstakingly slow delivering insights. You'll need to clean this up before entertaining thoughts of becoming a data-driven enterprise.

"Data has become bigger, faster and more complex, and marketers have to activate it on more channels," says Chad Meley, vice president of marketing at Teradata. "Most are not keeping up and drowning in the data deluge."

It's a serious problem that can't be fixed overnight. Here are a few best practices to get started.



## ASSESS YOUR DATA ENVIRONMENT

Start with this question: Do you have an accidental or thoughtful information architecture? An accidental information architecture arises when each team has the autonomy to architect information to meet its parochial needs, leading to hundreds of silos of replicated data. In contrast, a thoughtful information architecture, has a common set of core data—such as customer, revenue, products—that's shared throughout the enterprise.



## DESIGN WITH DATA GOVERNANCE IN MIND

Not all data is created equal, requiring different service-level agreements, governance and data quality, Teradata says. From a technology view, the resulting platform will need to accommodate a spectrum across the entire price/performance curve, deployment options across public and private cloud and a range of user personas.



## FOCUS ON DATA INTEGRATION AND QUALITY

There's no denying you face a Herculean task ahead. Integrating data and managing data quality will take effort, negotiation, time, hard work and the right solutions. But it'll be worth it in the end.



## PREPARE FOR NEW DATA SOURCES

Digitization, social media and ever-expanding Internet of Things devices, coupled with low-cost storage, are driving exponential data growth. Your data supply chain will have to manage the traditional flow of data with unstructured information from web logs, chatbots, call centers, etc.



## BRING SPEED INTO THE DATA SUPPLY CHAIN

It's critical to implement analytics in repeatable workflows, with data governance, in an automated way, Teradata says. This isn't easy, given that departments often use their own datasets, which limits answers and usability. By contrast, companies that integrate data and make it pervasive throughout the organization realize new synergy, visibility and business value.



## EXPERT COMMENTARY



**MARTYN ETHERINGTON**  
Chief Marketing Officer  
Teradata

**teradata.**

Business leaders know that optimizing the customer experience (CX) is vital. Both intuitively and from an extensive volume of research correlating revenue and cost-to-serve improvements with advancements in CX optimization capabilities.

But, enterprises may have very different views of what CX actually is. And, depending on the perspective, it can limit the full potential of a CX initiative. Some may define it as synonymous with a department like marketing, a customer touchpoint like the call center, or a tool like CRM. In our observations, CX leaders don't consider this narrow view. They look at the customer experience across channels, departments and whole systems.

Optimizing CX can be challenging. For one thing, most organizations have little visibility into the end-to-end customer journey that spans multiple customer touchpoints across multiple departments. Furthermore, enterprises suffer from an inability to sense and react to a multitude of customer pain points and opportunities. Lastly, organizations struggle to meaningfully personalize customer interactions in a timely manner—particularly in real-time—at the moment of truth.

**Marketing leaders can overcome these challenges and empower enterprises to execute a sustainable customer experience initiative if they:**

- 1** Enable the previously elusive 360° view of the customer by bridging the divide between IT and marketing. This allows data integration experts and citizen data integrators to collaborate rather than compete.
- 2** Turn data into customer insights by putting the marketer and CX professional in control with powerful, easy-to-use machine learning analytics along with other advanced analytics that provide richer, faster insights into customer behavior.
- 3** Transform customer insights into action by delivering personalized customer interactions in real time—seamlessly—across channels.



## A TRUE 360° VIEW

Achieving a 360° view of the customer requires both an institutionalized data management framework and self-service tools. The framework covers the acquisition, rationalization, governance and delivery of customer experience data traditionally under the purview of IT. Self-service tools for citizen data integrators promote agility while providing IT with much needed relief from the constant pressure and demands from the business to keep up with the flood of new customer data sources.

IT takes a methodical approach to governing, securing, and cleansing data. They're responsible for provisioning trusted data and meeting defined service level agreements (SLAs). These methods promote efficiencies for securely sharing and reusing data across the enterprise by eliminating silos and creating a single version of the truth. That might include things like point of sale (POS) and digital transactions, and product telemetry customer care.

While business users value such data services from IT, they can also find the processes and controls to be rigid and slow in cases where they demand new data sets to round out the customer profile. Things like social media, third-party data or specific interactions on the website. Because of the IT bottleneck that occurs when the business need for data goes unmet, the typical result is that business users create their own siloed system that has initial value on the margin ... but ultimately adds cost and complexity that impairs an enterprise CX initiative.

**There is good news, however. Enterprises actually no longer need to make a choice between foundational enterprise data management and agile techniques to capitalize on data with rapidly perishable value. There are new capabilities to address the last mile of data integration by putting more power and flexibility in the hands of the citizen data integrator. They are:**



### CHANNEL INTEGRATION

Enabling users to easily connect with other data sources and channels, both inbound and outbound, via APIs and SFTPs, to collect and ingest data. Using an intuitive, point and click interface, users can easily and quickly set up connections with internal customer-facing applications and third-party data sources.



### CONNECTED IDENTITY

Supporting the collecting, organizing and synthesizing of customer data in order to unify the customer profile. Data about your customers and prospects can come from every part of the business: sales, viewership, social, website, customer service and many other sources. It's critical to note that, without a method to create a golden key to link these data sets, valuable correlations simply cannot be made.



### TEMPORARY AND ELASTIC PROCESSING

Enabling experimentation and capitalization of newly revealed opportunities. An additional benefit is provisioning in the same platform where the enterprise data resides, which minimizes data movement, promotes effective governance and security, and increases time-to-value.



## TURNING DATA INTO CUSTOMER INSIGHTS

Enterprises have the opportunity to drive CX outcomes if they can sense and react to all the data at their disposal. Scaling a CX initiative requires putting powerful analytics in the hands of those with business acumen and the remit to implement customer-facing programs. Waiting on scarce programmers and data scientists to do this on your behalf will fail to create the necessary momentum required to continually generate and spot granular, high-impact insights.

With Vantage, no coding is required. Business users can easily leverage intuitive advanced analytics. Users can easily map and visualize the customer journey that precedes key moments, such as cancellation of service or upgrade to a more premium offering. Users can build customer propensity models, such as churn or likelihood to purchase, in a wizard-based UI—again without any coding. They can leverage machine learning to determine the next best offer for an individual customer. The result? Better insights and faster, more precise personalization leading to superior customer experiences.

Embedded workflow allows marketers and CX managers to create sophisticated customer attributes like customer lifetime value, profitability, or loyalty scores to create hyper-personalized customer profiles. Leveraging the workflow, users can also create ensemble models that combine predictive models with rules-based decisioning.

## TURNING INSIGHTS INTO ACTIONS

Knowing the right answer is worthless if you don't take action. CX professionals need to seamlessly operationalize insights across any channel, such as your website, mobile apps, call center, CRM tools, and other digital channels, to provide consistent and coordinated customer communications.

Vantage enables real-time dynamic personalization by determining the optimal message to deliver based on both what the customer is doing right now combined with historical, integrated information on that customer's unique experiences and behaviors. Machine learning optimizes the goal selected by the business user, such as maximizing revenue or minimizing cost to serve. These highly personalized offers are delivered at scale to reach millions of customers informed by billions of transactions and interactions. Real-time personalization makes it easy for marketers and CX professionals to deliver these dynamic messages through a company's website, SMS, POS, and other digital screens.

In order for any enterprise to have a successful, sustainable customer experience initiative that produces transformational outcomes that increase revenue and lowers cost to serve, it will need to leverage all of its customer data, put those with business acumen behind the wheel in turning data into customer insights, and remove the friction in turning thousands of daily insights into actions.

### SWEDBANK

Better analytics help Swedbank stay competitive. With more than 1.7 billion customer interactions annually, this bank is partnering with Teradata to integrate data and using analytics to stitch together the elusive 360-degree view of the customer.

[See How](#)

### AIR FRANCE-KLM GROUP

This airline connects over 100 million passengers per year. Path analytics from Teradata helps Air France-KLM better anticipate customer needs. It relies on data and analytics to understand each customer's unique experiences and get answers about their behavior.

[See How](#)

### SAUDI TELECOM COMPANY

A customer-centric approach and Teradata analytics allow Saudi Telecom Company to optimize customer experiences for more than 40 million subscribers. It delivers tailored messaging to engage individual customers, stay ahead of customer concerns, and deliver hyper-personalized marketing that makes an impact.

[See How](#)

### LLOYDS BANKING GROUP

This leading UK provider of financial services is deepening customer relationships with 16.4 million digitally active customers. The bank is partnering with Teradata to transform customer experience and deepen its customer relationships, becoming an advisor by anticipating and tailoring engagement based on digital interactions and behaviors, and understanding the signals along the customer journey.

[See How](#)



## BEST-PRACTICE LEADERSHIP



**BOON LAI**

**Cisco**

Vice President, Global Partner Marketing



**SCOTT MCALLISTER**

**Comcast Cable**

Former Senior Vice President, Digital Customer Experience Transformation



**NICOLE FRANCE and LIZ MILLER**

**Constellation Research**

Vice President and Principal Analyst



**SEBASTIAN DIGRANDE**

**Gap**

Former Executive Vice President, Strategy and Chief Customer Officer



**SURESH BALAJI**

**APAC at HSBC**

Regional Head of Marketing



## BEST-PRACTICE LEADERSHIP



**MIKE MARCELLIN**  
Juniper Networks  
Chief Marketing Officer

**RODAN+FIELDS**

**ELISABETH CHARLES**  
Rodan and Fields  
former Chief Marketing Officer



**KEYUR DESAI**  
TD Ameritrade  
former Chief Data Officer



**CHRIS CURTIN**  
Visa  
Chief Brand and Innovation Marketing Officer



**GOVINDARAJ AVASARALA**  
Vodafone Idea Limited  
Head of Enterprise Marketing



## BOON LAI

Company: Cisco  
Title: Vice President, Global Partner Marketing  
Industry: Technology



“ *Our customers are the ones who are evolving, and that evolution is worth celebrating, particularly at a time like this.* ”

### EXECUTIVE PERSPECTIVE

## #EXPECTATIONS

Companies that know their customers best and can predict and meet customer expectations are always in the best position for success. That’s certainly no different in these uncertain times. For that reason, Cisco has been striving to become a data-driven company in order to make decisions that keep us ahead of evolving customer expectations.

“Our customers are the ones who are evolving, and that evolution is worth celebrating, particularly at a time like this,” says Boon Lai, vice president of global partner marketing at Cisco. The road to meeting evolving customer expectations isn’t always easy.

In the past, a potential customer visiting Cisco.com and showing interest in a product was put into a lead center. The lead center determined which partner was best suited to handle the customer’s needs. Then the customer was handed over to the partner, and the buying process would essentially start anew.

Just as importantly, there was no solid estimate of how long that process would take. Moving all the way through that sales cycle could take anywhere from seven hours to seven days.

A year ago, Cisco launched a pilot project with one of its systems integrator partners, WWT, to leverage customer data, web browsing behavior and machine learning in order to deliver a more responsive experience. The project called for analyzing data to be responsive to the customer’s needs and present the customer with the right offer based on where they were in their buying journey. Those efforts are paying off today.

“Everything is digital now, and our customer expectations have changed,” Lai says. “They come to Cisco.com looking for Webex solutions for working at home and want to be able to buy and use it right away.”

Existing customers have evolved expectations as well. Their needs have changed due to the current global situation. An existing customer, for instance, might come to cisco.com seeking quick solutions to immediate challenges. For example, IT buyers want to be able to easily extend their software licenses to more team members or increase their software consumption.

“We also have insights on our customer’s usage and can serve up specific features that can help enhance their productivity and experience, turning them into advocates for our solution” Lai says. “That’s when we can really make a difference... even though customer expectations are shifting so quickly, we can proactively adapt our customer’s experience to stay ahead”



## SCOTT MCALLISTER

Company: Comcast Cable  
 Title: Former SVP Digital Customer Experience Transformation  
 Industry: Telecom



*“The truly powerful data comes in observing actual behavior, whether that’s shopping behavior or trigger behavior. You can sort what actually points toward activity and behavior, and start using those triggers to inform your marketing approach.”*

### EXECUTIVE PERSPECTIVE

## #JUMPBALL

Whenever people move to a new residence, they’ll sign up for a boatload of new services, including cable. They’re not beholden to use the same service provider at their previous residence.

“Every year about 10% of the customer set moves,” says Scott McAllister, former senior vice president of digital customer experience transformation at Comcast Cable. “That’s a jump ball for the organization.”

As a digital experience expert, McAllister is expected to win the ball most of the time—both new business and existing customers. But he can’t do it alone; he needs an all-star data science team, top executives in his fan club, and a single view of truth.

McAllister is a little bit like the floor leader, gathering all the disparate data pieces, striking up third-party data partnerships, distilling multiple versions of truth, and, critically, piecing together demographic data, behavioral data and trigger data.

“If you take those three pieces, you can start to put together more intuitive type forecasting,” McAllister says.

The final scores looks something like this: The data science team models the likelihood of customers moving to a new residence based on first- and third-party data. When an existing customer on the “likelihood to move” list goes onto the service provider’s website, the customer will have a “movers” experience complete with special offers.

“Sure, it’s a little reactive,” McAllister says. “But there’s a fine line of creepiness. You don’t want to look like you’re watching and anticipating when it looks like someone is going to move.”

There are times for data to help you be more proactive. From marketing journeys to service journeys to payment journeys, there’s always opportunities to give special offers or solve problems before the customer knows they need them. That’s the stuff that engenders trust and builds loyalty.

“If you truly want to unleash value for your customers, you need to anticipate and fulfill their needs in a whole different way so you become a loved brand,” McAllister says.

That’s winning the jump ball every time.



## NICOLE FRANCE and LIZ MILLER

Company: Constellation Research  
Title: Vice President and Principal Analyst  
Industry: Research



“ *Don't come from a reactive place when it comes to data; rather, look at business priorities and outline how a unified view of the customer will help to achieve that goal.* -France ”

### EXECUTIVE PERSPECTIVE

## #DATACULTURE

Customer data is only the beginning of wisdom, say Nicole France and Liz Miller, both vice presidents and principal analysts at Constellation Research.

True understanding comes from knowing what goals you're trying to achieve, such as improving profitability or top line revenue growth. It might be how to enter a new market or increase the amount of repeat business with existing customers.

“Once you have a clear view of those priorities, it becomes a lot easier to justify the need for a unified view of customer data,” France says. “Just building a data platform is not the answer. The real issue becomes understanding what data you need and what forms of analysis are needed.”

Once everyone understands the objectives, they have to work collectively towards those outcomes. Cross-functional collaboration is critical for advancing the data-driven customer experience. More than just turning on collaboration tools, people have to be committed.

“What truly moves the needle is when there is a substantive conversation across departments that is focused on driving outcomes that matter,” France says. “You don't achieve success magically by putting the right tools in place. Those tools are not going to resolve communication and coordination issues.”

The biggest hurdle to collaboration comes from the culture of data. Customer data carries lots of investment and great expectations. There's a sense of mystery and magic behind the science. This scares people, and they tend to recoil from customer data initiatives.

“In order to get the budget that we needed to get the data platform and data scientists who could help make sense of data, adjust it and understand it, we needed to create a bit of an aura of fear around data,” Miller says. “But now that we have the tools, we realize that data can be fun and, if organized properly, can be something that anyone, at any level of the organization, can leverage for customer experience.”



## SEBASTIAN DIGRANDE

Company: Gap  
 Title: Former Executive Vice President, Strategy and Chief Customer Officer  
 Industry: Retail



*“ The biggest challenge is to get an organization to execute against the mission and vision consistently. It’s about developing proof points, showing efficacy, building buy-in, and taking the next step and then the next step. ”*

### EXECUTIVE PERSPECTIVE

## #PROOFPOINTS

Sebastian DiGrande has led customer-data transformation efforts for brands that are not for the faint of heart. He has unified more than a dozen sources of customer data, struck up third-party data partnerships, and gained data-driven insights into the customer journey and a deeper understanding of existing customers.

All of this enabled him to launch a loyalty program that moved the needle in a meaningful way.

And yet, his biggest challenge was constantly having to convince top executives that data-driven insights about customers was the right thing to do. DiGrande says too many change agents are naïve when it comes to gaining executive buy-in.

CFOs, for instance, require a sound business case, proof point, and perhaps testing before agreeing to fund a high-ticket project. Then the process starts again for funding to scale the project. At every step, a CFO is wondering if the project is cannibalizing some other use of the capital.

CIOs are also notoriously difficult to convince. They hold the keys to capital allocation for technology and are often focused on legacy infrastructure, not new-fangled marketing tech projects. Without their due diligence, rogue projects can turn into a frankenstack and stall.

Then there are the marketers themselves. Many fear the coming of data-driven, predictive customer insights as a replacement to their human intuition. “It’s hard for traditional marketers to understand that their job is changing significantly,” DiGrande says. “For those who don’t have those skills, it’s very threatening.”

Gaining buy-in isn’t a one-time deal; it requires constant vigilance. The trick, says DiGrande, is to zero in on one or two use cases and proof points that show the value of leveraging customer data, such as tracking customer browsing behavior and serving up product recommendations.

“With each baby step, you start building a deeper understanding and appreciation,” DiGrande says. “Of course, the broader journey is still required to capture the full value.”



## SURESH BALAJI

Company: APAC at HSBC  
Title: Regional Head of Marketing  
Industry: Finance



*“ We have a duty of care with our customers. They have given us their data and trust us with their data. I don’t pass customer data to any party. ”*

### EXECUTIVE PERSPECTIVE

## #DUTYOF CARE

Most people have more than one bank account and pay for products and services in different ways. This means no single bank has a complete picture of what a customer is doing with their money, while regulations prevent banks from sharing data.

“What you see is customer data is only part of their life,” says Suresh Balaji, head of marketing at HSBC. “There is no way to verify through a third-party. We just need to operate with a big bag of salt when it comes to confidence loss between data pulls.”

Oddly enough, Balaji prefers it this way.

From a data standpoint, Balaji doesn’t have the complete picture of the customer and will never acquire the missing pieces. Yet he doesn’t want third-party verification because that would mean multiple parties would be sharing customer data. This opens the door to abuse.

Balaji is quick to point out that the Cambridge Analytica scandal was a tipping point that could have changed the course of history. Six years ago, Cambridge Analytica, a data firm owned by Robert Mercer, acquired the private Facebook data of tens of millions of users in order to sell psychological profiles of American voters to political campaigns.

It’s a lesson worth remembering about the dangers of unprincipled data manipulation, Balaji says. There’s no question customer data is tempting to many organizations, which is why he’s a proponent of privacy and banking rules and regulations governing data use. These are the guardrails protecting consumer trust.

Balaji says companies have a duty of care with customer data to do the right thing rather than how to make more money. He has a blanket rule not to pass HSBC customer data to any third-party, no matter how lucrative the deal may sound.

“An enterprise’s values and purpose should be at the heart of any data strategy,” Balaji says. “The minute it becomes about exploiting the data, the enterprise has moved a step closer to irresponsible behavior.”



## MIKE MARCELLIN

Company: Juniper Networks  
Title: Chief Marketing Officer  
Industry: Technology



*“ We often get caught up in how people use our products. We group buyers into personas that dehumanize them. But we have to go deeper. The most powerful insights truly get to the personal motivations. ”*

### EXECUTIVE PERSPECTIVE

## #DATA2INSIGHTS

In order to become a data-driven customer intuitive enterprise, there are a lot of steps, says Juniper Networks CMO Michael Marcellin. Here's his short list:

1. Don't settle for surface-level insights on what someone does with your product.
2. Make sure your messaging and value prop include how working with your company addresses intrinsic motivations.
3. Own your data. Don't buy a MarTech vendor's service that keeps the data in the cloud.
4. Create a consolidated view of all your customer data, such as a data lake that either the company or marketing owns and manages.
5. Invest in data scientists whose job is deliver insights to the business and independently report on the health of both the business and marketing's investments.

A steady stream of abundant data are the building blocks of customer insights. The trick is to assemble these blocks into true insights.

To this end, Marcellin says he's found two successful approaches: use a data science team to correlate data and test marketing's hypothesis or complement digital data with traditional qualitative research, such as online focus groups.

"Knowing their *why* helps provide context to what they say and what the data is telling us," Marcellin says.

The payoff can be significant, he says. The right insights will make everything marketing does better. Events will be more engaging, content more relevant. New automated MarTech tools could also let you create a customer-driven buying journey that looks different than any other traditional buyer's journey.

"The dream would be to automate the entire buyer's journey while seamlessly allowing for human touch when desired," Marcellin says. "It would radically change the roles of sales and marketing in the future and radically improve the buying process in customers' eyes."



## ELISABETH CHARLES

Company: Rodan and Fields  
Title: former Chief Marketing Officer  
Industry: Retail

**RODAN+FIELDS**

“ I want to predict what else customers would be interested in knowing about, so I can introduce them to relevant products, services and content. I want to understand the customer psyche and key motivators. ”

### EXECUTIVE PERSPECTIVE

## #REALITY

Data-driven customer intuitiveness sounds promising, and brands are making strides, but it's still out of reach for many marketers. “Unfortunately, most companies just aren't terribly sophisticated in this area,” says Elisabeth Charles, former CMO at Rodan+Fields. “I'm not sure how many are truly evolving to a customer-intuitive enterprise.”

Charles speaks as someone who knows exactly what she wants from customer data. What are customers saying about the brand on social platforms? What are they asking about inside call centers? What is the brand doing well—and not so well—in the customer journey?

These customer data insights need to be married to external data, such as cultural trends important to customers, and reflected in the brand's value proposition. For instance, it's important today to value diversity and inclusion, mobility, transparency, sustainability and a seamless customer experience.

Yet insights should go beyond behavior to the underlying motivations. “I want to know what triggers and differentiators got customers to choose me over the competition,” Charles says.

Charles says customers are making headway in becoming more intuitive through data, especially with emerging technology such as chatbots. Brands are already anticipating customer issues and questions, conducting geo-targeting ads, and recommending products to encourage more exploration, she says.

But there's a long way to go.

Many companies struggle with basic blocking and tackling. Blogs can't be searched. Content isn't leveraged in the right places. Lots of assets have been created but not strategically deployed.

Brands are still working on creating a 360-degree view of the customer and real-time personalization. They're trying to unify data silos and get systems to talk to each other. Many companies are only using machine learning and AI in very limited ways, she says, either because they're not sure how to deploy it or don't have the budget.

“Lots of talk, but not a lot of do,” Charles says.



## KEYUR DESAI

Company: TD Ameritrade  
 Title: former Chief Data Officer  
 Industry: Finance



“ *Most corporations today don't understand their data supply chain, and most analysts who generate reports don't realize they're using a data source that isn't really accurate.* ”

### EXECUTIVE PERSPECTIVE

## #DATASUPPLYCHAIN

As chief data officer, Keyur Desai had to generate outsized business outcomes for TD Ameritrade using data and analytics. It's a tall task; few companies find success. How does he do it?

Everything begins and ends with understanding the data supply chain, Desai says.

Truth is, data comes to an organization through fits and starts, at various times, and in different silos. Worse, not all data sources are created equal; they offer varying levels of quality, in terms of confidence in its accuracy.

The data supply chain is constantly changing and evolving with new systems and data coming online and old ones retiring, much like a living ecosystem. At some point analytics pulls data looking for patterns and actionable insights.

Herein lies the problem, says Desai. Analytics might be using revenue figures from an old Excel spreadsheet, not the system of record. Poor data governance might be letting dirty data seep into the data supply chain and corrupt the analysis, which can take months to clean up.

“Often, information is inaccurate because of bad data,” Desai says. “The amount of time it takes to perform analytics and deliver an answer takes too long, and so you're pretty much forced into making a gut-based decision.”

In order to solve this problem, brands need to understand the data supply chain and apply better data governance. The goal, Desai says, is to become proactive in identifying the right data sources, monitoring data quality, and resolving data issues quickly.

“We've got to get data governance to become anticipatory,” Desai says. “You've got to anticipate your data problems if you're going to be anticipating your customer posture.”

The other piece of this: delivering insights to business leaders before they have to make a decision, not as validation after the decision has already been made. It's all about speed in the data supply chain.

Desai believes the future model lies in self-service. A CMO, for instance, should be able to find data, procure data, inspect data, prepare the data for analytics, analyze the data, and acquire and share the insights.



## CHRIS CURTIN

Company: Visa  
 Title: Chief Brand and Innovation  
 Marketing Officer  
 Industry: Finance



*“Data is not a snapshot for life. It’s fluid and changing. Leading brands should try to expose a customer to things that might otherwise not be in their data field or data stack.”*

### EXECUTIVE PERSPECTIVE

## #BLENDEDCX

People who love to travel seek new experiences, which makes the travel industry a prime example of how data and innovation can work together, says Chris Curtin, chief brand and innovation marketing officer at Visa.

Consider a travel company that understands through data what a customer has enjoyed in the past. It’s possible to blend those experiences with experiences gleaned from lookalike customers. Now the customer can enjoy a wholly new experience in the future.

“Part of travel is discovery and experiencing something new,” says Curtin, who shapes Visa’s global marketing strategy. He’s always on the lookout for exciting customer experiences.

Serving up blended experiences in real-time and at scale is hard to do. Many challenges stand in the way. Big companies, for instance, are often organized around the street—earnings per share, quarterly financials—and not so much about a futuristic CX. CFOs, too, constantly question the efficacy of advertising.

“But I’m convinced that if you look 10, 20, 30, 40, 50 years out, the new form of advertising will be these new experiences,” Curtin says. “Companies that are best at providing these experiences will exist. The ones that don’t will have tried to buy your attention, your loyalty.”

That’s not to say brands can’t deliver new data-driven experiences sooner. Consider a smart refrigerator that collects and analyzes data on a customer’s shopping habits, as well as tracks product inventory. It can tell the customer when the milk is about to go bad.

“What if, in addition to getting milk delivered to you the next day in a frictionless way, you get airline miles with the purchase? You now have something to look forward to,” Curtin says. “Your life is just a little bit better as a result of all that. It’s so much more powerful and meaningful to a company like Visa than a 30-second television ad.”



## GOVINDARAJ AVASARALA

Company: Vodafone Idea Limited  
 Title: Head of Enterprise Marketing  
 Industry: Telecommunications



“ Given the nature of industry, the data environment is complex and rich with legacy . It offers insights covering many years, many facets of evolution, and how consumption patterns have changed over time. ”

### EXECUTIVE PERSPECTIVE

## #URGENCY

When GovindaRaj Avasarala, head of enterprise marketing at Vodafone Idea, talks about the potential for data to impact the customer experience, you can understand his enthusiasm. Yet he also tempers his words with the challenges lying ahead.

There’s a sense of urgency, too. The telecom industry is under constant disruption, Avasarala says. New capital-intensive players from within the industry are coming to the scene. Outsiders, such as over-the-top, or OTT, media services present a different kind of challenge.

Customer experience is critical, especially for Vodafone, from developing products and services to serving up digital experiences to millions of consumers and enterprise B2B customers. Hence, a data-driven approach executive and operational decisions is integral to business.

“As telcos evolve into techcos, there is a high sense of urgency to gain CX leadership,” Avasarala says. “Going beyond connectivity and being able to matter to lives of consumers and enterprises is the need of the hour.”

To get there, a lot of work lies ahead. Avasarala says data silos, lack of near real-time data, and legacy approaches to big data are the culprits for broken journeys, undifferentiated experiences and sub-optimal decision making. The impact on customer experience is direct and significant and all the more critical as we transition to the new normal.

Then there are big investments needed for big data, machine learning, artificial intelligence and associated platforms. But Avasarala sees this as an opportunity for legacy or traditional firms to play a catch up with digital native firms.

Avasarala envisions quite a return on investment.

Customer engagement will become richer and the business impact higher, he says. Privacy respectful Personalization is a great avenue for impactful marketing. New possibilities open up for omni-channel sales and marketing, especially in the current challenging times.

“From being customer-centric to customer-intuitive is good to strive for,” Avasarala says. “I have come across companies that have defined customer obsession as a core value. In such companies, the true north is clearly established and the goal post for such companies is not too far.”



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