

Evolving customer behavior and ecosystems

Use data, AI, and personalization to make it happen



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Introduction

While businesses began calling up their customers to survey the quality of their services over the last couple of decades, the first CX surveys date back to the 1750s. No matter the medium, surveying customers to gauge their satisfaction levels is a three centuries-old practice. However, calling a customer for feedback today most likely leaves a negative mark against the business as an uncalled-for interaction.

Customer experience metrics are no longer measured via telephonic surveys, at least not for organizations that deliver industry-leading customer experiences. Yet, delivering experiences that delight every single time is the key to competing in today's CX-driven world. In the 2010s, good CX was about delivering what was promised to the customer. In the 2020s, as most businesses are already doing that, customers expect brands to understand them as individuals, anticipate their needs, and offer them personalized solutions to their problems.

It is a significant ask, however, it is also one that businesses that survive and thrive in a world where customers are spoiled for choice are adopting rapidly. The average individual spends nearly 4 hours on their smartphone today. Rapid digitization has taken overall screen time to nearly 17 hours per day for heavy users. The consequence? An average user sees nearly 10,000 ads per day, of which a minuscule number of ads are relevant. This, coupled with reducing attention spans, has meant that most businesses are missing their targets and adding to the noise.

So, who wins then?

CX in 2022: Delights vs disappointments

To understand the CX landscape of today, it is crucial to visualize what good and bad CX looks like. Here are a few examples.





Experiences that disappoint:

- 1. Zuri logs into an apparel brand's app to shop for dresses. On the home screen, she sees dresses for petite women, despite shopping for plus-sized dresses and entering her sizing details while ordering from the app in the past. She must navigate through three sub-menus to filter the right dresses for her.
- 2. Matt uses a travel app to make his bookings. After landing from a flight, Matt receives a coupon to book a hotel room at a discounted rate. However, he finds out that the coupon is applicable only at select partner hotels at checkout. He then uses another travel app to make his booking.

Experiences that delight:

- 1. A winemaker personalized his shoppers' experience through an Al-based guide which recommends wines to the buyer through an in-store screen. Greta, a regular customer is unable to visit the store on a busy weekend and tries to order it online. On opening the winemaker's app, she is delighted to see the Al recommending new wines based on her shopping history and feedback.
- 2.Andy buys his clothes via an apparel aggregator's app. The more he shops through the app, the more he gets rewarded in return. Additionally, the app learns about Andy's color and style preferences and recommends clothes that align with Andy's taste. Occasionally, a stylist also attends his account and provides recommendations for him digitally.

Industry-leading experiences unarguably drive customer expectations and behaviors served to them by top brands today. At the same time, an evolving digital ecosystem characterized by novel regulations and technological paradigms invites fresh considerations to drive great customer experiences.

Under the hood: Drivers of delightful experiences

Delightful, personalized experiences (which are actively demanded by more than half of customers today) are not driven simply by digital touchpoints, or websites and apps backed by optimized processes. They are driven by concerted efforts that pivot teams and processes on customer journeys, broken down into end-to-end processes. To orchestrate excellent experiences for customers at an organizational scale, there are two key elements that must be injected into the technology architecture that drives business on a day-to-day basis.

Data is the new oil: Only when it is so treated

Data is widely recognized as the driver of personalized digital experiences today. However, it is time to move beyond the what and focus on the how: how will data drive personalization across various stages of the customer journey? The answer to this question lies in these three factors:



1. Unified

Personalized experiences call for data points and streams from across multiple functions of the organization. This data can then be used to build a 360-degree view of the customer. For instance, while a user's sales history can provide significant cues for their preferences around a product, their browsing sessions will signal their intent of a subsequent purchase. Combine both together and voíla, you have drastically improved your chances of turning them into a repeat customer.

Siloed data is the nemesis of personalized experiences, whereas unified data is a requisite.



2. Integrated

Unifying data from multiple functions of the organization calls for seamless integration between the multiple technology stacks that shoulder processes across departments. As a result, collating data from multiple systems calls for connectors that can ingest data from these systems and bring them to a single point. It is only after integrating data from multiple sources that the contextual value of data emerges.



3. Clean

The modern organization generates billions of data points, some of which are structured, others unstructured. But almost all of this data is unsuitable for use as is. Unclean data consumes expensive technical talent while slowing down the time to develop a use case. The data ingested from multiple sources must be cleaned before it is unified and stored in a single place.

Data ingested from multiple systems, cleaned and collated into a single data lake is ripe for driving personalization across the customer journey. Such data lakes are also called customer data platforms (CDPs), and aggregate data from tens of sources to paint a complete picture of each and every buyer. In a cookie-less world with ever-more stringent data

regulations, CDPs are the key to delivering personalized experiences.

Customer Data Platform are the new CRMs, and such platforms provide a comprehensive view of the customer to each touchpoint of the customer journey.

How do data platforms drive personalization?

Invisible AI: Keep your eyes on the end results

While the merits of AI have been stated and realized over the last few years, invisible AI will characterize the future. In other words, AI will only be realized in action while remaining invisible to the user. Think in terms of a customer service agent who is explaining a delay in delivery to a buyer over a call changing to his tone in line with recommendations powered by a real-time sentiment analysis algorithm.

Here are three ways in which AI is driving personalization today for forward-looking enterprises:

1. Automated A/B testing:

While A/B testing of marketing content like creatives previously consumed the efforts of an entire team, it is now possible to abstract the process and run marketing campaigns with the most successful asset. Facebook has already implemented this technology, and other niche tools like Adobe Experience Manager enable marketers to present a personalized version of apps and websites to their customers to maximize the chances of conversion. From trials and hypotheses to experimenting and decisioning, Al-driven A/B testing masks the A from the AI and delivers intelligent decisioning at the point of action.



2. Real-time recommendations:

As customer data platforms aggregate real-time views of the customer, Al now makes it possible to personalize experiences in near-immediate scenarios. For instance, a customer's credit card transaction in a new city can enable a bank to deliver personalized shopping and travel offers to the customer. Similarly, some websites make use of data points from new users' browsing sessions to help them narrow down to their favorite product faster. In exchange for additional first-party data, such brands can negotiate a win-win proposition by further personalizing the experience.



3. Funnel leakage detection:

Website audits and UX pain point detection processes are not only expensive, but they also delay the ultimate goal of serving the best possible experience to the end-user. Al-driven website audits can help diagnose leaky points in the customer journey while recommending the best actions for their resolution. In addition, digital service companies can now record usage sessions of their customers while anonymizing the data to inform product management roadmaps regarding the most urgent fixes.



Now AI is increasingly embedded in the key aspects of end-to-end processes. For example, while previously, AI use cases for decision support and insights were earlier made available to enterprise users outside the platforms that drove their workflows. These use cases are now embedded into such platforms, delivering native insights and executing key parts of workflows autonomously.

API-first: democratizing data and insights

While data platforms and AI are the pillars of data-driven customer experience personalization today, API-first design is what makes such paradigms possible. In fact, APIs serve as the bridge between data and insights for intra-organizational parts of customer journeys and help deliver personalized experiences to the end-user. Here are three crucial ways in which API-first architecture drives CX transformation efforts today:





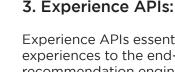
While CDPs bring the organization's customer data to a single platform, data access APIs build access to this data. Moreover, these data APIs serve clean ready-to-use data and democratize access to that data, irrespective of the department. In other words, data APIs expose the data that the organization possesses and every user across the organization.

Centralized API development efforts are instrumental in minimizing effort redundancy and building security and compliance into the data layer at ground zero.



2. Use-case-driven catalogs:

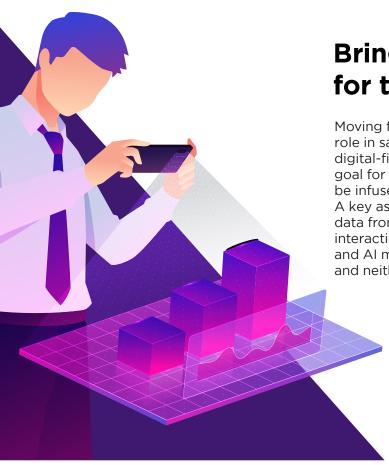
As centralized API development teams roll out new APIs that are ready to implemented across the organization, cataloging the multitude of APIs that have been developed can unlock a number of business benefits. A major benefit is that users across the organization can discover the data and insights available to them-thereby releasing use cases from silos and reorienting the focus on improving the customer journey.



Experience APIs essentially work together to deliver experiences to the end-user. These might be recommendation engines that show relevant products in the UI or personalization algorithms that deliver customized user interfaces to various customers. Such APIs typically call for strong synergies between API development teams, customer success teams, and product teams, bringing tangible improvements to the user experience.



API-first architectures are the cogs and wheels of a data-driven organization today, especially as the volume and velocity of data growth and the rising number of use cases of Al generate greater management and governance complexity in the organization.



Bringing it together: Serving for the individual

Moving forward, data and AI will play an increasingly central role in satisfying the rising expectations of customers in a digital-first world. Hyper-personalization must be a top goal for companies this decade. Hence, data and AI must be infused into everyday operations to make this possible. A key aspect of this journey is the ability to win first-party data from customers and use it to drive future interactions at the convergence of AI and data. The data and AI maturity roadmaps will be inextricably interlinked, and neither can advance without the other.

A vision to serve every individual with a personalized touch also means that creative development, management, and dissemination must be brought closer to the action takes in real-time. With Metaverse in development, and AR/VR technologies making inroads into customer engagement models, AI will play a greater role in speeding creative design, delivering assets to convert new users, and rationalizing communication efforts across channels.

What's next?

Imagine the frustration of being asked for your account number when your banking app is showing error codes instead of being directed to a resolution or having to scan through shelves in a shop to locate your desired product. What was commonplace and accepted a few years ago no longer works!

Hyper-personalization has been a long time coming. With a growing density of digital noise and rapidly emerging digital natives constantly resetting the bar that differentiates great experiences from average ones, personalization has bubbled down from a luxury reserved for high-end products to something expected by customers across all their transactions. Soon, shoppers will be asking Siri and Alexa to direct them to a product in the retail store. Weather apps will recommend the right clothing for a given day in sync with the individual's apparel shopping history. The list of examples is endless, and the possibilities are only limited by our imagination.

As enterprises embark on this journey, it is important to know that as much as personalization is about the individual, it is also about the context in which they are receiving the product or service. Data and AI will play an instrumental role in empowering highly contextual and personalized experiences in the years to come. Enterprises who act on this realization will find themselves leading the way into the future.



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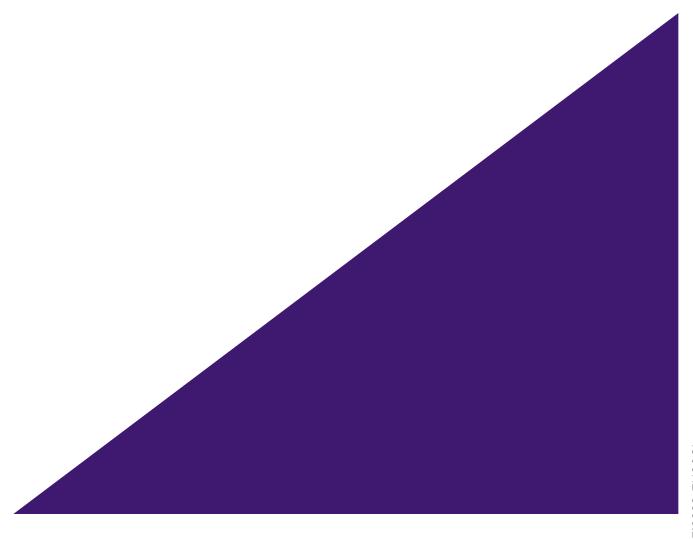
Gaurav Bhatia serves as the Chief Marketing Officer at PenFed Credit Union and joined PenFed in 2019. Previously he worked as the Chief Digital Officer for NewDay USA where he lead business operations, marketing/digital strategy, product, technology, brand, customer experience and technology. He has held senior leadership positions at several large Fortune 500 companies including AARP, Capital One, Sabre Holdings (parent of Travelocity.com), and NIIT Technologies with customers in the travel and financial services. Gaurav holds a Master's degree in Information Systems, An MBA in Marketing & Strategy, and a Bachelor's degree in Mechanical Engineering. He also has completed the executive leadership program at the Tuck School of Business at Dartmouth.



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