



Delivering Innovative Customer Experience Requires Enterprisewide Agile Operations

An IDC White Paper, Sponsored by Red Hat and Intel

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March 2020

“Providing better customer experience is the number 1 top objective for adopting a digital business strategy.”

IDG's 2019 Digital Business Study

1. More details are available at <http://www.idg.com/tools-for-marketers/2019-digital-business-research>

Delivering Innovative Customer Experience Requires Enterprisewide Agile Operations

Enterprisewide innovation is required to compete with the likes of Amazon, Apple, Alibaba, and other digital disruptors whose presence is seeping into virtually every industry. The urgency to respond to customer demands is getting board-level attention. Providing better customer experience is the number 1 top objective for adopting a digital business strategy, according to IDG's *2019 Digital Business Study*¹. The financial implications are imperative as market share slips quickly between companies during times of disruption.

Innovators in all industries are taking share from their competition with ingenious operating models that achieve astounding results. A consumer bank grew credit card payments by 50% in value by offering mobile ability throughout the full customer financial journey. A digital-first telemedicine provider is breaking growth records by facilitating 60% virtual interactions. A trucking manufacturer dramatically improved its customers' experience by reducing maintenance costs by up to 30% and decreasing catastrophic breakdowns by 80%.

To capitalize on their best opportunities to delight customers and provide next best actions, enterprise leaders must break down back-office and front-office barriers to ensure a new agile operating model where fluid, real-time, smart, customer-centric processes can be assembled and disassembled with alacrity. Speedy, accurate response is often the difference between disappointment and delight. IDC predicts that by 2024, 60% of capital investment typically earmarked for operational efficiency will shift to investment in operational responsiveness to the market for services and customization.

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60% OF INVESTMENT EARMARKED FOR
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RESPONSIVE SERVICES AND CUSTOMIZATION.**

Enterprises need a modern toolbox for experience innovation. Often, it's the enterprises with the greatest amount of raw material for innovative engagement that struggle most with adapting. Advantageous competencies and knowledge remain trapped in departmental silos. A business that is slow to respond to market opportunities and has difficulty executing on innovative ideas must modernize. The ability to monitor, activate, and personalize experiences by incorporating streams of real-time data is key to capturing the opportunity to offer services that wow. Leading enterprises are implementing experience innovation hubs that provide a unified system for channel, system, and data agility that enables enterprises to innovate freely, pivoting quickly to meet changing customer and market requirements, to scale and expand at a reasonable cost.

Case Study: Multi-billion Dollar Global Bank Shares its Path to Innovation Experience



A large global bank realized that its digital customer engagement and self-service capability was below where it needed to be. Each year, the bank spent more money and more time attracting new prospective customers but struggled to convert them. The cost of service was also too high. The bank lacked sufficient means to build loyalty with existing customers, especially for customers with branded cards for specialty retailers who shopped at brick-and-mortar stores. What the bank discovered, what it went through, and how the bank innovated provide a great road map for other businesses that are interested in improving the customer experience they provide.

Guidance 1: Form a Cross-Functional Team to Work Across Internal Silos

A cross-functional team was assembled. They immediately came face-to-face with the root problem plaguing many businesses. The company was split into silos. The call center team, the digital team, and the mobile team, for example, each operated independently. The company prided itself on having the latest and greatest technology. However, each group used its own tools and data and leveraged different people to design user interfaces. The result was that customers were getting different experiences depending on where they went. At times, customers even received different answers on how to solve problems. Each group had its own success metrics. For example, the call center operations team desired greater agent efficiency. This metric drove decisions, such as outsourcing. There may have been better routes to efficiency, such as leveraging marketing system. However, this group was goaled on acquiring customers and had no interest in helping their colleagues save money. These leaders had no way of seeing how their individual measurements, if not executed properly, were detracting from one another.

Guidance 2: Identify the Multitude of Customer Journeys

The cross-functional team realized that to improve digital engagement, they needed to think like a customer. They identified 13 typical customer journeys, including promotions, payments, disputes, and fraud reporting. The team found that each of these journeys ran horizontally through multiple legacy pillars. For example, a customer might start a dispute on the website but neglect to finish it. The ideal customer journey would be to automatically send a text message or an email to remind the customer that the interaction was still open and provide a nudge to complete it. Finally, the journey needed to pick up that dispute right where the customer left off. Connecting these multitude of journey steps would require connectivity between all the systems and channels the company deployed.

Guidance 3: Create Shared Organizational Metrics

Innovating customer journeys horizontally across long-standing company pillars was not going to be easy. The cross-functional team started by removing the motivational roadblocks. They identified several key performance indicators (KPIs) that could be shared by the leaders across the company. One shared KPI mandated more digital engagement everywhere. Another KPI sought to improve the company's overall cost of service versus merely efficiency in one pillar. Another goal was to simplify the delivery of services to improve customer experience. The team helped the leaders see that improved customer experience — more consistent, more positive, more personalized — would lower overall business costs because less money would have to be spent to acquire new customers. The new capability would also allow the company to more easily develop new services and respond to new opportunities.



Guidance 4: Advance Agility with an Experience Innovation Hub

Another shared KPI was to improve agility. This objective prevented the company from going down paths that might be easier in the short term but not drive real change. With agility as a goal, business process teams and their IT partners would be unable to hit their marks based only on adopting the latest and greatest technology. This goal helped motivate a move into an agile framework with the adoption of DevOps by the IT team. To become agile, the company needed to break down monolithic processes and business logic into modular elements that could be developed, tested, and deployed quickly. These modules could also be recombined in the future into innovative new processes.

The technology solution that the company selected needed to support these shared objectives. The solution was required to connect all the systems supporting customer journey services, including those core systems such as customer accounts and general ledger that were still in mainframes. Maybe in the next five years, these systems would become cloud native, but the company depended on access to these capabilities today. Also, customer expectations demanded that all communication channels be supported (e.g., SMS, chatbots, email).

Data and artificial intelligence (AI) capabilities were key considerations. The company needed behavioral analytics, modeling, and other data services to create the responsive journeys that would delight customers. Performance speed was also critical. Some platforms the company considered worked by sending data back and forth to a central system. However, when a customer is engaging with a website in real time, the company felt that milliseconds matter — a lot!

Finally, cost was a consideration. Since lowering the cost of service was a goal, the company wanted to be able to scale and the freedom to innovate without adding what it considered to be exorbitant costs.

The bank decided to adopt Red Hat's Middleware portfolio on OpenShift to provide the system these capabilities. The Red Hat open source approach allowed the bank to build an experience innovation platform that met its unique requirements at a reasonable cost. The company considered other solutions that were on its approved vendor list but found each lacking in a significant way. The Red Hat approach to customer engagement provided a repeatable framework that enabled the bank's required modularity and technologies. The solution included Kubernetes, containers, and microservices. Red Hat's guidance also helped the bank connect all the various company systems and channels.



Customer Innovation Crashes Through Every Industry

Every industry faces the imperative to innovate in this era of digital disruption. C-level executives realize the urgency of customer centricity. According to IDC's 2020 CXO Future Enterprise Survey, 72% of C-level executives identified "creating empathy with customers at scale" as more important or significantly more important than other digital initiatives. IDC defines "creating empathy at scale" as developing deep relationships with customers at scale by understanding a situation from their point of view and acting accordingly.

To succeed, every company will need to rise exponentially if it wants to deliver experiences that customers have come to expect when they use a banking app, place an online order, or book their next vacation. Examples of radical new business models and established players activating deep competencies to deliver delightful, differentiated experiences can be found everywhere.



44% of customers are likely to leave a bank with poor digital experiences.

(IDC's 2019 U.S. Consumer Banking Channel Preference Survey)

FINANCIAL SERVICES

A fully digital bank in Asia brings a plethora of services to 300+ million registered users who would otherwise be underserved. From credit cards to ecommerce, the bank offers mobile ability throughout the full customer financial journey — shopping, paying bills, making investments, and saving, as well as offering related services such as insurance. The system that underlies this capability is robust and scalable. Importantly, it helps the bank collaborate with a wide range of financial and nonfinancial partners needed to offer various services. Openness and an API-driven architecture are key factors in meeting all the requirements. The architecture future-proofs the company in anticipation of the constantly changing regulatory environment. Among the long list of achievements since the launch of the system, this bank has the fastest rate of credit card activation in its region and total electronic payments grew nearly **50% by value and over 60% by volume** in the first year. **44% of customers** are likely to leave a bank with poor digital experiences, according to IDC's 2019 U.S. *Consumer Banking Channel Preference Survey*.



AUTOMOTIVE

A commercial trucking manufacturer understood that its customers, fleet and vehicle owners and operators, want to improve the monitoring and health of their vehicles. Unplanned maintenance and on-time delivery were also pressing issues causing operational complexity, cost pressures, and a poor customer experience. The manufacturer realized that evolving the vehicles into a multisensor platform that could communicate in real time with the cloud could meet these challenges. The manufacturer adopted a platform that uses artificial intelligence and machine



learning to ingest, understand, and process more than 70 telematics and vehicle data feeds, including vehicle warranty information, traffic data, vehicle history, geolocation, and weather reports. The company's customers have seen improvements of up to **30% on maintenance costs** and vehicle downtime and up to an 80% decrease in catastrophic breakdowns.

ENERGY

An energy provider overhauled the experience of its industrial customers to improve the predictability, accuracy, and ease of gas consumption. By integrating billing with usage monitoring and scheduling systems, the energy provider has automated reordering and replenishment. New projects that are underway include remote diagnostics and automated operations optimization. Using the solution, customers have already saved a sizable amount of time, reduced paperwork, and dramatically lowered the risk of business interruption by experiencing **20% fewer outages**. The energy provider has benefited by an accelerated order-to-cash cycle and **90% fewer billing errors** and saved hours of over-the-road time by reducing "failed" deliveries (deliveries to a site when the customer's existing gas stock was more than half full) by 60%. The energy provider is tracking to see 25% less customer churn due to increased satisfaction.



MANUFACTURING

IDC predicts that over the next decade, **90% of manufacturing industry growth** will be captured by companies that can successfully engage directly with consumers. The greatest challenge to strategies such as mass customization and direct to consumer (DTC) typically lies in the supply chain. An eyeglass DTC company used technology to virtually eliminate all the objections that a customer might have for buying products online. The company revolutionized the try-on process, the shipping and trial process, and the retail experience. Recently, the company took on the exam and prescription service business using mobile apps and connecting with a network of doctors.



HEALTHCARE

A health insurance company promotes itself as a company centered around the patient, one that leverages technology to engage customers and guide them to the right care. The fast-growing company, serving 250,000 individuals, families, and small businesses in several U.S. states, claims the highest level of customer engagement in healthcare. **More than 40% of members** use the web and mobile apps each month. "Digital-first telemedicine" is key to maintaining low cost, low friction, and speedy service. **Over 60% of interactions** within this company's network are virtual. The company partners with a growing number of leading healthcare companies and is in the process of integrating even more medical, behavioral, pharmacy, and member support and education services.



HOSPITALITY

One of the world's most geographically diverse casino entertainment companies has made its mark by offering what has always been very high-end customer experience. Today, the company finds that a deluxe experience means one that customers craft and personalize to fit their own desire. Customers want the process of discovering, booking, and enjoying their experience to be as frictionless as possible. The company started with the simple but challenging business objective to deliver a world-class digital experience that rivals the level of service the guest would get in person at every stage of the customer journey. The company attacked this challenge by adopting a robust, modern, cloud-first approach to data, web, and hospitality platforms. Some of its innovations included express check-in/check-out kiosks, piloting digital assistants for staff to conduct real-time translation, and an AI-based virtual concierge available via text. Overall, the organization has achieved an average **10% increase in satisfaction scores**.

The Toolbox for Digital Innovation

To capitalize on their best opportunities to delight customers, enterprises urgently need a modern IT toolbox for experience innovation. An experience innovation hub will empower business owners with vision with the ability to keep pace with accelerating cycle times and gain the modular building blocks needed to easily create personalized journeys for customers, partners, and other stakeholders. An experience innovation hub is a central nervous system that unifies all the elements needed to develop, orchestrate, and activate differentiated digital experiences.

Removing Barriers to Innovative Experiences

Often, it's the enterprises with the greatest amount of raw material for innovation that struggle most with adapting. Advantageous competencies and knowledge remain trapped in departmental silos. Behind the scenes, companies know that generating a new business process can be excruciatingly difficult. But customers don't care about the company's problems. They'll be the ones to say what frustrates, meets expectations, or delights. And they will make their vendor choices accordingly. 92.3% of business executives responding to IDC's 2019 *IT Buyer Experience Survey* said that customer experience will have a greater influence over their technology buying decisions over the next three years. IDC predicts that by 2021, businesses offering frictionless experiences across their ecosystem will experience a decrease of 20% in customer attrition.

92.3% of business executives said that customer experience will have a greater influence over their technology buying decisions.

(IDC's 2019 IT Buyer Experience Survey)

51% of C-level executives named “not being able to provide equivalent experiences across all channels” as a top challenge.

Innovative processes that delight customers must begin and end with the customer in mind. A Capgemini study found that 80% of consumers are willing to pay for a better experience. Adapting to customer expectations can be a challenge considering all the possible variables that a customer journey might involve. Journey variations can range into the thousands, or potentially millions. According to a 2017 *Harvard Business Review* study, 73% of customers used multiple channels during their shopping and customer engagement journeys. For a credit card customer, a journey might start with paying a balance. But it doesn't stop there: Open another account? Refinance? Respond to a marketing offer? What about resolving disputes, solving a problem, or reporting fraud? Start with a mobile app? Follow up on social media? Complete the process on the web, through a messaging app, or “in real life”? What if a customer prefers to take the journey steps in a different order than is typical?

Experience Innovation Hub Capabilities

To ensure that business owners and designers can deliver delightful experiences as needed, the ideal experience innovation hub must provide the capabilities that are discussed in the sections that follow.

Dynamic Adaptability

Businesses must be able to innovate freely, pivoting quickly to meet changing customer and market requirements. They must be able to scale and expand. These actions must be possible without technical restriction and without breaking the bank. If a company needs to spin up a pricing and promotion campaign in a day, the experience innovation hub must accommodate this speed with minimal IT involvement. The experience innovation hub would provide agility in several elements:

- » **Channel agility:** Digital channels continue to proliferate, and some, like mobile, are exploding in use. It's imperative that all companies in all industries transform their customer-facing business processes into meaningful digital experiences. 44% of customers are likely to leave a bank with poor digital experiences, according to IDC's 2019 U.S. Consumer Banking Channel Preference Survey. For example, how much delight could be added if customers could conduct complex financial transactions and real contracting, such as booking a cruise and adding all the extras and amenities, on their mobile devices? Customers increasingly hop between channels as they progress their journeys. The risk of not offering excellent digital experiences is increasing. 51% of C-level executives named “not being able to provide equivalent experiences across all channels” as a top challenge to their ability to create empathy with customers at scale, according to IDC's 2019 *CXO Future Enterprise Survey*.

It's not enough just to be aware that something important just happened. Businesses must act because these opportunities to act are fleeting. Milliseconds matter.

89% of respondents said that personalized communication makes them feel that vendors care about them.

- » **System agility:** The ability to recombine functionality from multiple systems is key to building customer-centric processes and provide relevant next best actions. Companies invariably find that true customer-centric business processes drive straight through the heart of several functional silos. Rarely will an enterprise initiate innovation in a greenfield. Executives need to be able to draw on the capabilities for new campaigns and journeys from a wide range of systems, including legacy, without concern for impact.
- » **Data agility:** The quality of both human and machine decisions dramatically improves with data availability. An experience innovation hub must unlock data from its system of origin and permit it to flow to where it is needed with appropriate governance. With data continuing to flood in from a multitude of systems, including social and sensors, companies need a comprehensive way to access data at the speed of business.

Intelligence Services

Experiences that differentiate depend on a sophisticated array of intelligence services. A speedy, accurate response to a customer's online action is often the difference between their disappointment and their delight. Personalization — which can range from the pleasant reaction to getting a confirmation text from your bank when you make an online payment to a deeply appreciated service such as a preemptive fix to integral equipment on the brink of failure — is another key to delightful experiences. 89% of respondents said that personalized communication makes them feel that vendors care about them, according to IDC's 2019 *IT Buyer Experience Survey*. An experience innovation hub must provide the following intelligence service capabilities:

- » **Real-time event vigilance:** While some experiences can be preplanned and launched at the command of the business, many more will be triggered by incalculable external events. The ability to activate and personalize experiences by incorporating streams of real-time data from social media, web behavior, financial trading floors, weather, traffic, or any number of time-related sources is key to capturing the opportunity to offer delightful service. For example, by monitoring real-time stock market feeds, a financial services company could contact customers immediately if their portfolios need rebalancing.
- » **Real-time event responsiveness:** It's not enough just to be aware that something important just happened. Businesses must act because these opportunities to act are fleeting. Milliseconds matter. An experience innovation hub must enable companies to design business processes that depend on split-second decisioning and action at the point of need. A hotel could build loyalty by recognizing a customer when he/she arrives onsite with a text message offering concierge services for special events happening that evening.

20% of revenue growth will come from “white space offerings” that combine services from previously unlinked industries.

- » **Predictive capability:** Although many events that are important to customers will occur randomly, many others can be predicted — if enough of the right data can be analyzed. An experience innovation hub will include predictive services that identify trends, derive insights, and make recommendations in ways that both systems and their human proprietor can easily use. For example, a cable company could monitor home modems to predict failure in areas of high-power fluctuations and schedule a visit for proactive replacement.

Future-Proofing Experience Innovation

The experience innovation hub will need to future-proof a company’s experience capability. A company’s ability to adapt to change must be continuous and ongoing.

IDC predicts that by 2025, 20% of revenue growth will come from “white space offerings” that combine services from previously unlinked industries. Imagine mashups where healthcare companies combine with automotive companies to create safety services or retailers combine with energy companies to create sustainability services. An experience innovation hub must be able to accommodate ideas that involve wider ecosystem partnerships. Technologies on the horizon will also open new worlds of innovative capabilities that an experience innovation hub will need to accommodate. Market share typically goes to the companies that capitalize early.

Executives will want to understand the practicalities of the necessary business changes to gain more certainty and reduce the risk of their next chapter.

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Red Hat's approach to delivering customer engagement hubs allows businesses to build an innovation platform for their unique requirements and intellectual property. Leveraging open source, the Red Hat solution helps businesses adapt to changing market dynamics, shifting customer demands and expectations, and the need to constantly incorporate new technologies.

Red Hat's solution gives businesses the power to optimize their offerings for an enhanced customer experience and next best action. Selecting the right technology partner—especially one that embraces open source—can accelerate experience innovation and implementation, empowering businesses to make changes quickly, and enable continuous modernization.

Red Hat's solution goes beyond simply providing an architecture. Red Hat offers a repeatable framework based on real-world deployments using cloud-native technologies such as Kubernetes, microservices, and containers running on Red Hat OpenShift for hybrid, multicloud, and on-premise deployments.



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