

Power Digital Performance
and Outstanding Customer
Experiences With a New
Model for APM



The Highs and Lows of Digital Transformation Initiatives

Digital transformation projects are everywhere...



68%

of CEOs are champions for digital today, compared to just 33 percent in 2007.¹

...but a shocking majority are doomed to fail. IDC believes that,



70%

of siloed digital transformation initiatives will ultimately fail due to insufficient collaboration, integration, sourcing or project management.²

**How do you solve for this disconnect?
By focusing on the customer experience.**



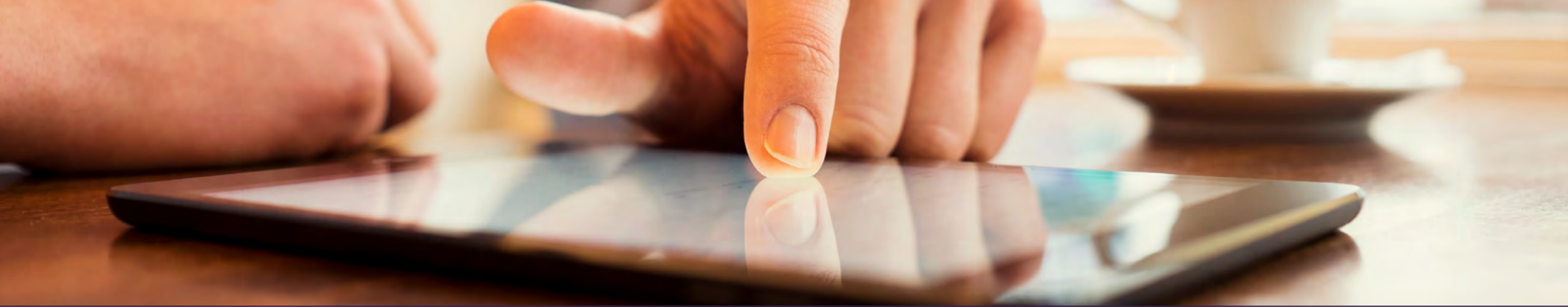
83%

of U.S. consumers say having a positive experience with a brand is more important than the product itself.³

¹ PwC, "2017 Global Digital IQ® Survey: 10th Anniversary Edition," 2017.

² Bill Keyworth, Jeff Rivkin, "2016 IDC FutureScape CIO Agenda Prediction 4," November 2015, IDC#US40550115.

³ Lithium, "The Path to Happy Customers," survey conducted online by Harris Poll on behalf of Lithium from December 28-30, 2016 among 2,032 adults ages 18 and older in the U.S. and among 1,006 in the U.K.



It's More Difficult Than Ever to Deliver a Five-Star Experience

To truly capture customer interest and loyalty, your applications and services have to deliver reliable experiences that delight users, scale to support their changing needs and regularly refresh with new innovations.

As a result, you need ways to measure the metrics that really matter, namely: engagement, loyalty and satisfaction. It's also imperative that you match agility with quality, making application performance a priority goal for everyone—from the business to marketing to IT. Finally, you need to future-proof your business by rapidly adopting the latest technologies and innovations that will meet—and exceed—customers' expectations.

There are a number of reasons why achieving these goals can be challenging. For example, as developers modernize the application lifecycle to speed innovation—adopting microservices, cloud technologies and containers—it's become increasingly difficult for DevOps teams to not only maintain visibility into all relevant services and devices on the backend, but also guarantee performance levels that will support a flawless customer experience on the frontend. What's more, these new distributed environments have introduced many more moving parts, making traditional performance measures obsolete.

As a result of this complexity, when engagement suffers in an application, it can be difficult to pinpoint the root cause of the issue amidst all of the interconnected components. Is it the content? The UI? Maybe a crash, bug or glitch? Getting answers to these questions leads us to our next challenge: organizational alignment.



The Critical Importance of “Speaking the Same Language”

When you think about everything that goes into the typical digital initiative, you often have a marketing and design group with responsibility for guiding the customer journey, developers and coders charged with building innovation into the application itself, and then engineers who have to monitor and maintain an environment in which the app can perform at the level you and your users expect. [Continue >>](#)



The problem in most organizations is that these groups work in silos with their own data, metrics and tools. In essence, they're not speaking the same language. So when something goes wrong in the application, it's too easy to absolve themselves of responsibility and point fingers at the other groups.

For example, imagine the application support team discovers an application issue that could be impacting customers. Using their data and tools, they can pinpoint the problem, but they have difficulty identifying which service, container or code is causing the issue. That can only happen from an applications perspective, which requires data to be passed in context and correlated with other information among the development and applications teams.

When you combine these communication challenges with the technology complexity discussed earlier, it's no wonder that so many organizations cannot uncover the insights needed to maximize application performance—from UI and code level to backend systems and everything in between.



The good news is, 93 percent of organizations believe they could improve the way they measure the customer experience across digital channels, which means they're ready for a better way.⁴ The only question is how?

⁴ Vanson Bourne on behalf of CA Technologies, "Building a Better Digital Experience," 2016.

Creating Alignment Through Analytics and Performance

In order to deliver the best possible customer experience, you need to have insights into operational performance—from mobile to mainframe—and user behavior, such as drop-off rates, most popular viewed pages, application flows and usage.

In other words, you need both the “inside out” operational data and the “outside in” user behavior information. And to create alignment amongst marketing, development and operations teams, you need analytics that translate all of this data into a common language and metrics all parties can understand and share accountability for.

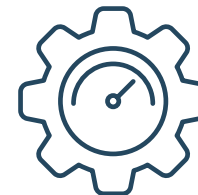
When you're able to achieve this alignment through analytics and performance, you have the opportunity to:



Optimize the customer
journey and engagement



Improve application reliability
and digital performance



Speed application
innovation



Optimize the Customer Journey and Engagement



In order to optimize the customer journey, you first need to understand how users are interacting across multiple channels.

The right digital performance solution will provide insights into drop-offs, retention rates, user session journeys and usage heat maps, so you can see which areas of your applications are keeping them engaged and why—which is data you can use to drive improvements in apps, functions and code that aren't performing optimally.

It's also critical to monitor all of the components that make up the entire omnichannel experience—from applications, devices and carriers to infrastructure, code and design elements.

With the right digital performance solution, you'll have visibility into the average user retention, average time spent in the application, customers' location, their flow through the application and where they dropped.

For example, imagine you have 44,000 active users, but they only spend 3.6 minutes in your application with a 10 percent retention rate. This would indicate that a good volume of users who come to the app aren't fully engaging with it or returning for multiple sessions, indicating a need to reevaluate the content and customer flow through the app.

Another example might be if you launched a new European digital program and noticed that most of your digital traffic was still coming from North America. This could mean either you haven't yet penetrated this new market, or the customers are having difficulty accessing your application. With proactive monitoring, you could better understand performance prior to rolling out new versions in global locations.



Improve Application Reliability and Digital Performance

Behind every digital service is a complex fabric of IT infrastructure and application architecture components that must perform reliably in concert to deliver the expected user experience.

The right digital performance solution will provide performance insights into complex, flexible and scalable environments by helping you visualize all of the elements they comprise—from microservices to containers to clouds and more—and analyze performance patterns and trends over time. And with intelligent analytics and alerting, you'll be able to detect and rectify slow-growing chronic problems and fast-acting acute ones—preventing your teams from being burned out dealing with false alarms and alert storms.

The next step, of course, is connecting all of this inside-out data with outside-in user performance metrics, so you can bridge any performance gaps that are created throughout the application architecture.

For example, with the right digital performance solution, you can collect and analyze hundreds of thousands of metrics across a broad set of environments and protocols, giving you comprehensive performance insights at scale—which enables you to provide a seamless experience across all platforms.



Speed Application Innovation

Engineering a high-quality customer experience doesn't have to wait until an application has been released and you're collecting feedback for future updates.

With the right digital performance solution, you can monitor and improve performance throughout every stage of the software development lifecycle—from coding to assembly to testing and finally production—so you can shift monitoring left and gain insights for continuous improvement before your digital service has even launched.

Then once it's in market, the best solution will shift monitoring right, providing everyone—from marketing and the business to DevOps engineers—shared insights into how users are engaging with the application via heat maps, application flows and usage patterns. With this kind of data, you'll increase your understanding of your customer' journeys and usage patterns, so you can develop a more customer-centric cycle of continuous innovation aimed at driving engagement, increasing conversions and improving retention rates.



About the Solution From CA Technologies

Within the CA Digital Experience Insights SaaS environment is a suite of digital and application performance monitoring capabilities that help you deliver an exceptional customer experience by improving application performance from the inside out and the outside in. You'll do this by identifying and resolving problems quickly, managing the entire application experience across all channels and monitoring every step of the user experience. The suite includes:

- **CA Application Performance Management (CA APM):** Proactively monitors and provides diagnostic insights into applications across mobile, Web, cloud, microservices, containers and mainframe. Patent-pending analytics provides expertise in the form of guided assisted triage workflows for in-depth, root-cause diagnostics across development and production applications, simplifying and speeding the time it takes to find and fix issues.
- **CA App Experience Analytics:** Uniquely combines user behavior with operational performance, providing intuitive reports that reveal a deeper understanding of customers' overall digital experience. Using these insights to optimize the user journey helps you retain and attract new customers, increase revenue, achieve faster resolution times and deliver innovations quickly by boosting development productivity.
- **CA App Synthetic Monitor:** Uses synthetic transaction monitoring to check the behavior of your application and identify where bottle necks or problems occur—from slow page response times to erratic behavior of login pages, shopping carts and even APIs. As a result, you can proactively manage the end-to-end performance of your cloud, mobile and traditional Web applications to deliver an exceptional end-user experience.

The solution is available through [CA Digital Experience Insights](#), our SaaS-based digital operations monitoring and analytics platform.



Why CA for Digital and Application Performance Monitoring?

Optimized customer journey and engagement



1.8x

Businesses that chose CA App Experience Analytics and CA APM over competitive solutions are 1.8x more likely to rate themselves completely successful at providing a seamless experience across platforms.⁵

“CA App Experience Analytics will provide us with the insights into buyer behaviors, crashes and application performance that will enable us to proactively solve any incidents that occur and improve the overall digital experience our customers receive.”

— Francisco Guirado, IT Monitoring Manager, Produban (IT Division of Santander Bank)

⁵ Vanson Bourne on behalf of CA Technologies, “Building a Better Digital Experience,” 2016.



Why CA for Digital and Application Performance Monitoring?

Improved application reliability and digital performance



84%

of IT organizations agree that CA App Synthetic Monitor helps proactively manage app performance to provide an optimal user experience.⁶



86%

of surveyed IT organizations improved their application performance by 15 to 35 percent or more with CA App Experience Analytics.⁷

⁶ TechValidate, "TechValidate survey of 43 users of CA Technologies Application Synthetic Monitor," June 21, 2016, <https://www.techvalidate.com/product-research/ca-application-performance-management/facts/C42-3EC-151>

⁷ TechValidate, "TechValidate survey of 7 users of CA App Experience Analytics," March 10, 2017, <https://www.techvalidate.com/product-research/ca-application-performance-management/facts/195-A18-57A>



Why CA for Digital and Application Performance Monitoring?

Speed application innovation



2.3x

Businesses that chose CA App Experience Analytics and CA APM over competitive solutions are 2.3x more likely to rate themselves completely successful at speeding time to market for new apps and products.⁸

CA APM increased the productivity of developers by 15 percent, resulting in a financial savings over three years that totaled more than \$5.3 million.⁹

⁸ Vanson Bourne on behalf of CA Technologies, "Building a Better Digital Experience," 2016.

⁹ Forrester Research, "The Total Economic Impact of APM," April, 2017.

Ready to power digital performance and flawless customer experiences with your applications and services?

Get started with a free, 30-day trial of CA Digital Experience Insights today.

CA Technologies (NASDAQ: CA) creates software that fuels transformation for companies and enables them to seize the opportunities of the application economy. Software is at the heart of every business, in every industry. From planning to development to management and security, CA is working with companies worldwide to change the way we live, transact and communicate—across mobile, private and public cloud, distributed and mainframe environments. Learn more at ca.com.

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