



DATADOG

Visibility to Value: A Digital Experience Monitoring Guide

How complete digital experience visibility across
the user journey drives business value

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Introduction

In an era where digital applications have become the primary way businesses connect with their customers, the performance, reliability, and quality of those experiences directly shape revenue, loyalty, and competitive standing. Yet most organizations are losing ground faster than they realize. According to [PwC's 2025 Customer Experience Survey](#), **89% of executives believe customer loyalty has grown in recent years, while only 39% of consumers say the same.** That gap between perception and reality is one of the most consequential blind spots a leadership team can have.

The challenge is coming from many directions at once: a market where customer experience quality is deteriorating and a technology landscape that is raising user expectations faster than most organizations can respond. [Forrester's 2025 Global Customer Experience Index](#) found that customer experience quality has hit an all-time low in North America for the second consecutive year, with **21% of brands declining in quality and only 6% improving.** Meanwhile, AI is simultaneously accelerating the pace of software development and permanently raising the bar for what users consider a great experience. Customers now expect interactions that are fast, frictionless, and responsive to their needs in real time, and **70% of executives already acknowledge that customer expectations are evolving faster than their organization can adapt.**

Customers' tolerance for poor experiences is lower than most organizations expect. Research from PwC shows that even among customers who love a brand, **59% will walk away after several bad experiences.** The opportunity lies on the other side of that risk—organizations that can consistently deliver fast, reliable, and frictionless digital experiences build the kind of trust that translates directly into retention, revenue, and long-term growth.

Organizations cannot protect what they cannot see, and they cannot improve what they cannot measure. With AI continuously raising the bar for what users consider a great experience while accelerating the velocity of software development, that blind spot carries a higher cost than ever. Customers are lost before anyone knows something is wrong, brand perception erodes with every degraded interaction, and growth stalls when teams cannot confidently measure the impact of what they release. This is where **digital experience monitoring (DEM)** becomes critical, giving organizations the ability to see, measure, and act on every layer of the digital journey, connecting technical performance directly to users and business outcomes.

This eBook shows how organizations can use DEM to protect revenue, accelerate growth, and enable future-proof innovation—redefining the measure of success from individual service targets to the end-to-end journeys that define every user's experience.

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The Blind Spot between Systems and User Experience

Every day, customers interact with digital products that organizations believe are performing well. Internal dashboards show healthy metrics, and teams have no active alerts, but customers are encountering slow load times, broken flows, and failed transactions that never surface in the data because the tools watching the systems were never designed to watch the experience. By the time the business feels the impact, the damage has already been done.

The root of the problem, as explored in [The Benefits of End-to-End Observability](#), is fragmented visibility. When each team owns a different layer of the product with different tools and different objectives, no one has the full picture. Without a unified view that connects frontend behavior to backend performance to user outcomes, the true cost of a poor digital experience only becomes clear once it has already affected the business.

The stakes of this blind spot extend across the entire organization:

- **Revenue is at risk.** Without visibility into where users are encountering friction, organizations cannot identify the critical user flows, like checkout or onboarding, that are quietly losing customers and leaking revenue.
- **Brand perception suffers.** Users do not distinguish between a backend failure and a frontend bug—they only experience the outcome. Every degraded interaction chips away at the trust that loyalty is built on.
- **Customer churn increases.** Users abandon the flow, close the app, and open a competitor's product instead of submitting support tickets. By the time churn shows up in the data, the experience failures that caused it happened weeks earlier.
- **Innovation slows.** In an environment where AI is compressing release cycles and raising the bar for what users expect, teams that lack confidence in their releases become risk-averse. Shipping slows and experimentation stalls. The ability to move fast and stay competitive diminishes.
- **Operational costs climb.** When visibility is fragmented, incident response becomes reactive and time-consuming. Teams spend hours correlating data across tools, chasing root causes that a unified view would have surfaced in minutes.

Each of these risks is a direct consequence of incomplete visibility. DEM closes that gap by making the full digital journey visible and actionable, from detecting friction before users encounter it to understanding the business impact of every experience delivered.

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The Value of Digital Experience Monitoring

DEM gives organizations complete visibility into how users experience their digital products and ties those experiences to business outcomes. It measures, tracks, and optimizes the quality of digital interactions across the full user journey, from the moment a user first encounters an application to the moment they complete their goal. Where traditional monitoring asks whether systems are running, DEM asks whether users are succeeding. That shift in perspective, from infrastructure health to user outcomes, is what makes DEM a fundamentally different and complete approach to understanding application performance: one that measures the full journey, from a user's first interaction to the moment they successfully complete their goal.

A complete DEM strategy connects every layer of the digital journey—from proactive synthetic testing before users encounter issues, to real user monitoring, session replay, and behavioral analytics that reveal exactly what users experience and why, to experimentation that validates whether changes are actually making it better.

Why DEM Matters and What It Gives Organizations

- **Protect revenue by catching problems proactively.** Most experience failures go undetected until they show up in business metrics. DEM gives organizations the ability to identify and resolve friction proactively, before it affects users, erodes trust, or impacts revenue.
- **See the full picture of what users are experiencing.** Without visibility across the complete user journey, organizations are making decisions based on incomplete information. DEM gives every team a shared and continuous view of how digital products are performing from the user's perspective, and when paired with backend monitoring, extends that visibility all the way to backend root cause.

- **Reduce the business cost of incidents.** Every minute an experience issue goes unresolved is a minute users are encountering friction, abandoning flows, and reconsidering their loyalty. DEM dramatically shortens the time between an issue occurring and it being identified, diagnosed, and resolved, reducing the business impact of every incident.
- **Make product decisions with confidence.** As AI accelerates the pace of development, the ability to validate those investments quickly becomes a competitive advantage. DEM surfaces the behavioral data and experimentation insights needed to understand what is actually working, what is not, and where investment will have the greatest impact on user experience and business outcomes.
- **Connect digital experience directly to business growth.** DEM links the quality of digital experiences to the metrics that matter most to the business, adoption, conversion, retention, and revenue, giving leaders the visibility they need to understand which experiences drive growth, where users struggle, and where to focus next.

4 Full Visibility across the Digital Journey

The three steps below cover the core DEM journey, each one a distinct layer of visibility into the user experience, from synthetic monitoring to real user monitoring to product analytics and experimentation. A fourth step completes the picture by connecting DEM to application performance monitoring, closing the loop between what users experience on the frontend and what is happening across the full technology stack. Together, these four steps represent what complete, end-to-end digital experience visibility looks like in practice and what it delivers for the business when every layer of the journey is visible and connected.

For organizations that get this right, the payoff is significant: faster time to resolution, less revenue lost to experience failures, and the ability to tie technical performance directly to business outcomes.

Step 1: Detect Friction Early

In many organizations, user friction is discovered reactively, for example, when a customer reports a broken checkout flow or regional outage goes unnoticed until conversions drop. By the time the team is aware, users have already been affected and revenue has already been lost.

Synthetic monitoring is the first line of defense between your business and the revenue, trust, and loyalty that experience failures put at risk. In an era where AI is accelerating release velocity and user expectations have never been higher, it is the foundation a resilient digital business is built on.

WHAT IT DOES	Synthetic monitoring solutions continuously simulate critical user workflows—such as login, checkout, and onboarding—across every environment, around the clock, before issues ever reach a real user.
THE RISK	<p>Without synthetic monitoring:</p> <ul style="list-style-type: none"> - Issues reach users before teams have any chance to detect or respond, impacting trust and conversions. - Every undetected regression is a revenue event. Issues go unnoticed until users report them or business metrics decline. - Teams cannot innovate quickly when every release carries the risk of an undetected experience failure.

THE OUTCOME	<p>With Datadog Synthetic Monitoring:</p> <ul style="list-style-type: none"> – Teams shift from reactive firefighting to proactive assurance. – Critical user workflows are protected around the clock across every layer, from browser and mobile to API and network. – Fewer incidents reach users. – Releases ship with confidence and the business can move fast without trading reliability for speed.
KEY QUESTIONS TO ASK	<ul style="list-style-type: none"> – How do we know our most critical digital flows like checkout, login, or onboarding, are working before customers tell us they are not? – How confident are we that our releases are not breaking anything for customers? – How much of our engineering time is spent responding to incidents versus preventing them?

Step 2: Understand Real User Experience

Knowing your critical flows are functioning is not the same as knowing how your users are actually experiencing them. A checkout that passes every test can still be slow, confusing, or broken for a specific device, region, or customer segment. Without visibility into real sessions, those failures stay hidden until they appear in your churn rate or your support queue. **Real user monitoring** and **session replay** tell you what is actually happening when real users interact with your product across every browser, device, and geography. Together, real user monitoring and session replay give organizations the visibility to catch experience failures faster and resolve them before the business feels it.

WHAT IT DOES	<p>Real user monitoring solutions measure the availability and performance of real user experiences across web and mobile applications, giving teams the visibility they need to identify and investigate issues across every platform and device.</p> <p>Session replay solutions provide a video-like replay of user sessions, showing exactly what a user saw and did at the moment an issue occurred.</p>
THE RISK	<p>Without real user monitoring and session replay:</p> <ul style="list-style-type: none"> – Teams have no visibility into how individual users are actually experiencing the product across specific customer segments, devices, or geographies. – Teams cannot reproduce what users encountered, slowing resolution, prolonging customer impact, and increasing engineering costs.
THE OUTCOME	<p>With Datadog Real User Monitoring (RUM) and Session Replay:</p> <ul style="list-style-type: none"> – Experience issues are caught and resolved faster, reducing the revenue impact of every incident. – Friction is surfaced and addressed before it becomes churn. – You can protect brand perception and long-term customer loyalty by resolving experience failures before customers feel them.
KEY QUESTIONS TO ASK	<ul style="list-style-type: none"> – Do we know how our product performs for every type of user—across every device, app version, and geography—in real time? – How much revenue and customer loyalty are we losing to experience failures we don't yet know about? – When a customer has a bad experience, how long does it take us to know exactly what they encountered? – When a customer reports a problem with our product, how long does it take our team to understand exactly what they experienced?

Step 3: Turn User Behavior into Confident Product Decisions

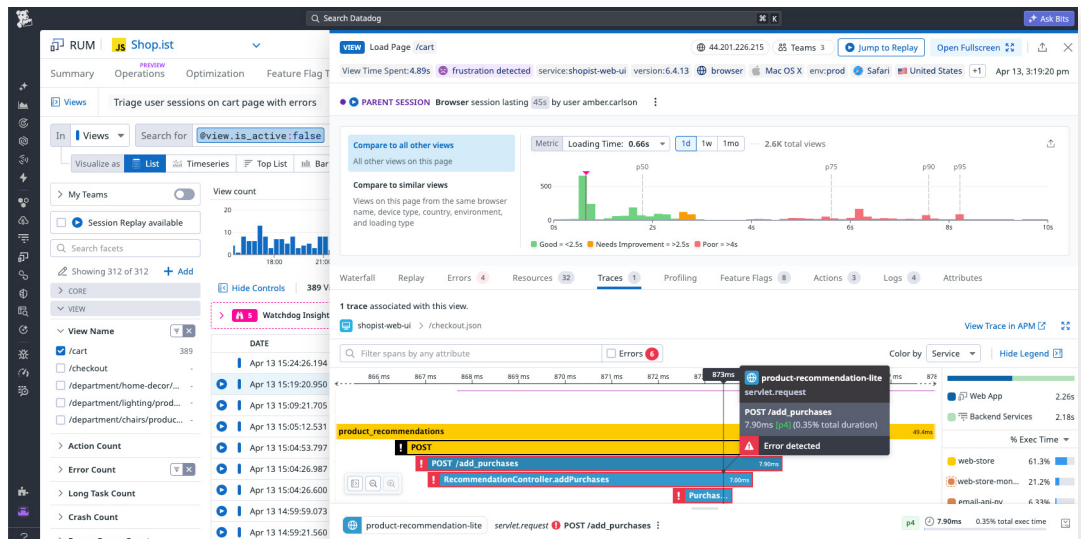
The organizations that grow fastest are not the ones that ship the most—they are the ones that ship the right things. Every feature is a bet, and in a market where AI is accelerating product development and user expectations have never been higher, the cost of betting wrong has never been greater. Solutions providing **product analytics**, **session replay**, and **experiments** allow organizations to connect what users do to the decisions that shape what gets built next—helping ensure every change is validated against the metrics that matter most: conversion, retention, and engagement.

WHAT IT DOES	<p>Product analytics surfaces behavioral patterns across the user journey, revealing how users engage with features, where they drop off, and which flows drive the outcomes that matter most to the business.</p> <p>Session replay adds a qualitative layer to your analytics data with a video-like recreation of how users naturally navigate your product, where they hesitate, where they struggle, and why they abandon flows.</p> <p>Experiments enable teams to test product changes in a controlled way—using feature flags to manage rollout and measuring user and business impact with statistical confidence before committing to full release.</p>
THE RISK	<p>Without product analytics, session replay, and experiments:</p> <ul style="list-style-type: none"> – Teams know where users drop off but not why, leaving the root cause of conversion and retention problems unresolved. – Engineering time and product investment are wasted on problems that do not move the needle. Teams can see users are leaving but have no way to understand why. – Teams lose the ability to measure what is working and what is not, becoming reluctant to ship, reluctant to experiment, and unable to answer the one question that matters most to the business: Is what we are building actually driving the outcomes we need?
THE OUTCOME	<p>With Datadog Product Analytics, Session Replay, and Experiments:</p> <ul style="list-style-type: none"> – Product decisions are made with confidence and evidence. – Teams know which features and flows drive revenue and engagement, and where to invest for the greatest impact. – Experimentation becomes a repeatable engine for growth, enabling faster innovation without increasing risk.
KEY QUESTIONS TO ASK	<ul style="list-style-type: none"> – Do we know where and why users are dropping off in our most critical flows? – When we ship a new feature, do we know whether it is actually being used and whether it is driving the outcomes we built it for? – Before we roll out a major product change, do we have a reliable way to know whether it will improve or degrade the experience for our customers? – Are our product decisions grounded in how real users actually behave, or are we building on assumption?

Step 4: Connect Every User Interaction to the Full Stack

A digital experience failure has two costs: the impact on customers while it is happening, and the time it takes to find and fix the cause. When frontend and backend teams operate in silos with separate tools, every minute of unresolved friction has a direct cost in revenue, customer trust, and loyalty. Connecting DEM to application performance monitoring—the layer that tracks the health of your backend services, infrastructure, databases, and third-party dependencies—collapses that window, tracing every user-facing failure from the moment a customer felt it to the root cause that triggered it.

WHAT IT DOES	<p>When connected to DEM, every user-facing symptom can be traced from the frontend experience all the way to its backend root cause—whether the issue originates in a service, a database, a third-party dependency, or the frontend itself.</p> <p>Application performance monitoring collects and analyzes telemetry across backend services, infrastructure, and dependencies, mapping how requests flow through the system and pinpointing exactly where performance degrades or failures originate.</p>
THE RISK	<p>Without connecting DEM and application performance monitoring:</p> <ul style="list-style-type: none"> – Teams operate in separate silos, each with their own tools and their own view of the same incident, but neither having the full picture. – Root cause identification is slow, manual, and dependent on cross-team coordination. Every minute of unresolved friction has a direct cost in revenue, customer trust, and brand loyalty.
THE OUTCOME	<p>With Datadog Digital Experience Monitoring (DEM) and Application Performance Monitoring (APM) connected:</p> <ul style="list-style-type: none"> – Incidents are resolved faster, reducing the revenue, trust, and loyalty impact of every experience failure. – Engineering teams spend less time in reactive investigation and more time building, shifting from firefighting to building with confidence. – Every team works from a single, connected view of the digital journey, eliminating the silos that slow resolution and increase risk.
KEY QUESTIONS TO ASK	<ul style="list-style-type: none"> – How much engineering time and business impact are we losing to investigations that could be resolved in minutes with a connected view of the stack? – If a major incident impacted our most business-critical digital experience right now, how quickly could we answer these questions: What broke, why did it break, and who is affected? – Do we know which of our backend services are most at risk of causing a customer-facing experience failure?



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Digital Experience Monitoring Customer Story

thrivent®

[Thrivent](#) is the original purpose-based company. It is member-owned, founded more than a century ago when neighbors came together to insure each other. Today, Thrivent serves over two million clients, manages more than \$200 billion in assets, and holds superior financial health ratings from Moody's and S&P.

In recent years, Thrivent has been making a concerted shift from being insurance agents to purpose-driven financial advisors, helping individuals and families plan for the future, establish legacies for their loved ones, and strengthen their communities. The goal was twofold: enhance client satisfaction and loyalty by creating financial plans that reflect their customers' values and goals while also fostering a more rewarding and sustainable career path for advisors. To bring this vision to life, Thrivent increasingly relied on its website and digital channels to deliver reliable client-centric experiences. At the heart of this transformation was a critical question: How do we build the kind of digital infrastructure that supports our mission—and how do we know when something breaks?

To modernize its observability approach, Thrivent turned to Datadog—not just as a tool, but as a strategic partner to overcome challenges blocking enterprise-wide digital transformation.

Thrivent's engineers, product managers, and business stakeholders were able to get a unified view of application performance, infrastructure health, and customer experience. Results include:

66% MTTR from 10 hrs → 3 hours

Using Datadog monitors instead of transitional, call center-base detection

82 → 0 service level objectives

observability shift enabling teams to make more stable and well-informed decisions

76 support tickets/mo

handled directly by Datadog instead of Thrivent engineers

50% cost savings

Due to consolidation of logging platforms

[READ THE FULL CASE STUDY >](#)

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Conclusion

The organizations that get the most value from DEM are those that connect what matters most to their business—mapping observability data across synthetics, real user monitoring, session replay, product analytics, and experiments to the critical user flows that drive revenue and retention. When monitoring is organized around business outcomes rather than technical components, every team can answer the questions that matter: Is this experience working, how is it performing, and what is it delivering for the business? With DEM and application performance monitoring unified, organizations have the visibility to understand, protect, and continuously improve the experiences they deliver.

Digital experience is no longer a technical concern—it is a business imperative. The organizations that consistently deliver fast, reliable, and frictionless experiences are the ones that retain customers, protect revenue, and maintain the competitive standing that growth depends on. To learn more about how DEM can help your organization achieve complete visibility across the digital journey, explore Datadog's [Digital Experience Monitoring solution](#) and see how Datadog has been recognized for its DEM capabilities [in the 2025 Gartner Magic Quadrant for Digital Experience Monitoring](#).

[SIGN UP FOR A FREE TRIAL](#)



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