

Cloudflare App Innovation Report

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The modernization advantage

In an era marked by persistent economic disruption, application modernization is a survival imperative.

While some organizations are still debating strategy, leaders are laying the groundwork that makes rapid innovation not only possible, but inevitable. For them, the process of modernizing their application infrastructure and internal workflows represents a systemic shift, one that reshapes how their organizations operate and deliver value.

This transformation sits at a true inflection point, driven by three powerful forces.

1 First, **the rise of agentic artificial intelligence (AI)** magnifies the potential ROI of modernization initiatives. AI-powered systems demand agile infrastructure, real-time data access, and applications that can integrate and adapt on the fly. By driving modernization initiatives to support these goals, organizations are better-positioned to expand their AI use cases and see bigger results.

2 Second, **sophisticated cyber threats demand sophisticated threat responses**. To stay ahead of advanced, complex, and evolving threats — without compromising on application performance or the user experience — organizations need security that is embedded across their infrastructure by design. Detecting and responding to these threats requires deep observability across the entire stack, which is only possible when organizations are able to unify their applications and infrastructure on a single, well-integrated platform.

3 And third, **users have raised the bar**. They have come to expect instant, personalized, and seamless digital experiences as the default, rather than the exception. By failing to meet the threshold for secure, high-performing applications, organizations risk losing relevance, revenue, and user trust.

Key takeaways

- The rise of agentic AI magnifies the potential ROI of modernization initiatives.
- Sophisticated cyber threats demand sophisticated threat responses.
- Users have raised the bar for digital experiences.

The real divide — between those who are leading the conversation and those who are left behind — is both a technical and cultural one. Leaders make strategic moves from a culture of discipline, focus, trust, boldness, and confidence. They take time to perfect their internal processes, view security as a growth multiplier, and take calculated risks to maximize on innovative technologies like AI.

Those who lag behind, by contrast, are forced to manage an ever-expanding technical debt. Without a solid core, internal alignment, and resource optimization, they lose out on key opportunities for expansion, waste resources patching security gaps, and struggle to support AI initiatives with the same efficiency and speed as their peers.

The urgency here is clear: Agentic AI, accelerating cyber threats, and surging user expectations are rewriting the rules of competition. Organizations that understand how to modernize effectively are the ones who shape markets, define experiences, and set the standard for what comes next.

For the rest, the call to action is simple. **Modernize the entire stack — applications and infrastructure together, built on a unified platform — or risk being defined by those who already have.**

The anatomy of a leading organization

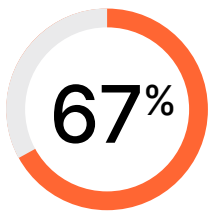
Leaders gain advantage by building a strategic foundation, not just by working harder.

In the race to take advantage of new technologies, leading organizations understand the importance of first prioritizing a solid foundation. They not only optimize their application infrastructure to maximize resilience and security, but create an environment where good ideas accelerate naturally — making innovation an inevitable outcome instead of a chance occurrence.

This foundational strength is why leading organizations are poised to dominate the age of AI. With a resilient and agile infrastructure already in place, they can incorporate new technologies with remarkable speed and confidence. They aren't scrambling to adapt, but are instead able to allocate resources toward widening their competitive advantage and pursuing business-driving opportunities.

While every leading organization in this report has different structures and priorities, they each share four defining traits: a streamlined decision-making process, an aggressive, "AI-first" approach, security by design, and a focus on continuous innovation.

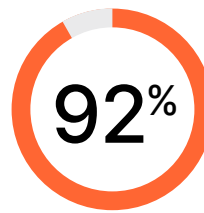
Streamlined decision-making



67% of leading organizations centralize decision-making with only a few people (vs. 19% of laggards)

Leaders are defined by how they make decisions. Those who have simplified their command structures enable quick, decisive actions backed by bolder financial commitments. This agile structure is the key to overcoming roadblocks and turning innovation into an inevitable outcome while others remain stalled by bureaucracy.

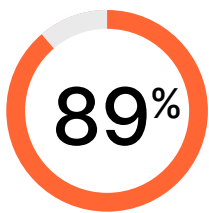
An aggressive, "AI-first" approach



92% of leading organizations say their application modernization efforts very positively impact AI use (vs. 59% of laggards)

A clear competitive gap is widening. Leaders who use an "AI-first" strategy are nearly three times more likely to see a clear payoff from their investment. While others debate the merits of implementing AI, leaders have already developed strategic business cases for it — and have the infrastructure and internal agility necessary to implement it in a meaningful way.

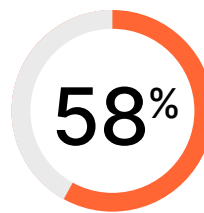
Security by design



89% of organizations that report a high level of alignment* have already built new applications designed to use AI

Leaders understand that security must be built into their applications by design — not tacked on as an afterthought. Not only does this bring their organization into greater alignment, but it allows them to spend fewer internal resources remediating security incidents and more time and effort on expansion, innovation, and better user experiences.

Developer enablement



58% of leading organizations say their developers spend more time maintaining their existing foundation versus building entirely new systems (vs. 17% of laggards)

Leaders empower their developers to focus on strategic modernization efforts, rather than fixing broken systems or rebuilding from scratch. This, in turn, becomes the vehicle for lasting success, as leaders are able to more quickly and effectively scale applications, take advantage of the latest AI technologies, and devote more resources to meet business imperatives.

*Organizations who report high alignment between security and application modernization initiatives.