



Reducing Complexity for Digital Transformation

How Citrix creates customer value by simplifying the digital transformation journey

“Bringing in new technology for the goal of digitization without addressing the business processes is a fool’s errand. The ones that we’re seeing who are doing it very well have the seat at the table — they are the enablers. They understand the direction, they understand the customer and they understand exactly where to bring technology to drive the business forward.”

— Christian Reilly, Citrix CTO



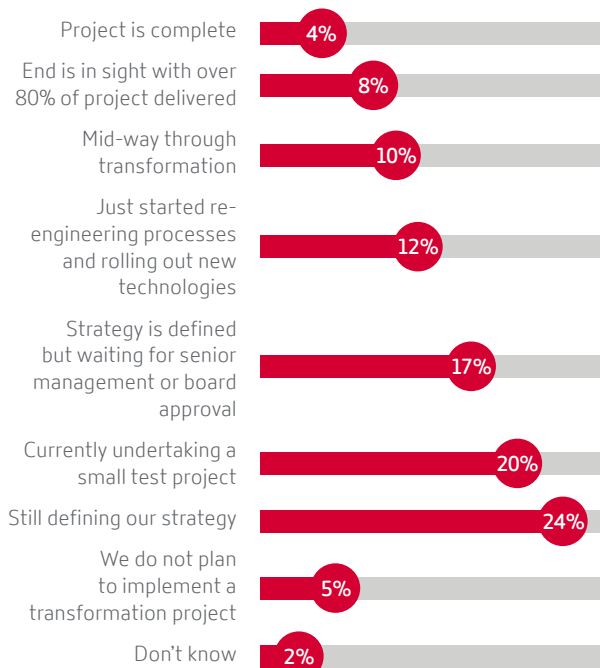
Digital Transformation Is Hard

In a PricewaterhouseCoopers study, 86% of CEOs stated that digital transformation is their number one priority. Across most industry verticals, this represents an existential threat to their organizations. Few businesses are immune—and those that appear immune today won't be tomorrow.

“Digital disruption is set to wipe out 40% of the current Fortune 500 firms in the next 10 years”

— Information Age magazine

How Far Has Your Organization's Digital Transformation Progressed?



Digital disruption is set to wipe out 40% of the current Fortune 500 firms in the next 10 years.¹ This has moved the agenda of digital business transformation off the CIO's desk and onto the boardroom

table. With the onus of execution still ultimately resting with the CIO, no sane CIO underestimates the difficulties in navigating the digital business transformation journey.

Simply put, digital business transformation is hard. A survey carried out by ERP Software Blog and Sapio Research in 2018² provides some insight into just how things are going out there. Progress has been understandably sketchy. There are many obstacles to contend with. Some, as you would expect, are cultural—namely, *resistance to organizational change and organizational siloing*.

This is backed up by research performed within PWC's Front Office Transformation practice, which cites that three-quarters of digital transformations fail to generate returns that exceed the original investment. Of those that fail, 70% are due to a lack of user adoption and behavioral change.³

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—PricewaterhouseCoopers

The user adoption part is significant. Today's user experience is broken, and technology is often the smoking gun. Gallup estimates that distraction and disengagement in the workforce is costing global businesses \$7 trillion in lost productivity, turnover, and worker frustration.

“The employee experience is broken. Distraction and disengagement in the workforce is costing global businesses \$7 trillion.”

— Gallup

1. <https://www.information-age.com/65-c-suite-execs-believe-four-ten-fortune-500-firms-wont-exist-10-years-123464546/>

2. <https://www.erpsoftwareblog.com/2018/02/digital-transformation-challenges-overcoming-departmental-silos/>

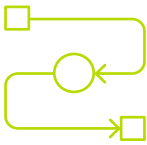
3. <https://medium.com/pwc-front-office-transformation/walking-the-talk-we-prioritize-people-over-technology-and-you-should-too-1743fdc187fb>

Common Pitfalls of Digital Business Transformation

While the opportunities are many, so too are the pitfalls. Understanding what these pitfalls are is crucial. If I had to sum it up in a single word, that word would be **complexity**. There is no question that the key to success here is in taming that complexity. Make it simple for the business to understand what's going on and simpler to course correct and react to external market forces. Make it simpler to introduce process change, and to absorb both technology and business acquisitions. And perhaps most crucially, make the employee experience uncomplicated, engaging, and productive.

Process vs. Productivity: Rate-limiting Business Momentum

In this fast-paced digital age, identifying and finding faster ways to fix business processes that today constrain outputs, create unnecessary complexity, and add cost has never been more critical. Poor, convoluted processes asphyxiate every aspect of the business. It is here where the concept of “business agility” is most at risk. It is here where the effective use of technology can help streamline existing business processes and enable new, more agile ones. The impacts can be profound. Getting this wrong slows down the rate of product and service innovation and hampers the adoption of new digital business models. With data being the new center of gravity, organizations must become more adept at making data-driven decisions. Obvious advantages emerge from leveraging analytics on existing and future data sets to establish a clear, concise, and, most importantly, accurate “state of the nation.” And beyond that, applying machine learning algorithms to predict future outcomes accelerates the path to those selected preferred outcomes.

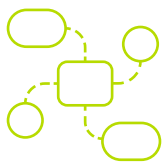


Adoption vs. Adaptation: Walking the Technology High Wire

The rate of technology adoption has never been greater, nor the promise of its impact more alluring. Businesses are under extreme pressure to adapt to this ever-increasing rate of technology-enabled change. However, the rate at which a business can adopt new technology versus the rate at which they can successfully adapt to it remains the key concern. This is an exceptionally delicate and **complex** balance. There is a common misconception that **agility**—a much overused term in IT circles—means doing everything much more quickly. The true meaning of agility is doing things both quickly **and** more easily—with the latter part often overlooked. As is often cited, technology is like fire. You can cook nice things with it, or it can burn down your house. But agility not only applies to the rate of technological change, it also applies an organization's attitude to cultural change: Are they willing to become a culture that can learn, one that is prepared to take risks, fail, and fail forward?

Aggregation vs. Disaggregation: Silos and Parallel Universes Everywhere

Technology also has a profoundly adverse effect on the business disaggregation—and not only technology itself—but also the organization as a whole. The net effect is often **silos and parallel universes**. “App sprawl” and “data islands” make data hard to find and difficult to effectively model. Also impacted are security and data/workflow integration efforts. The promise of flexibility and agility brought through cloud and SaaS adoption also tests the cohesion of many organizations, making it easier for Lines of Business (LOBs) to unshackle themselves from the traditional IT controls. Even within IT, the traditional silos separating the user end compute, application development, and networking domains are doing the business an injustice. At the very point that organizations need to be more unified, there is a clear and present temptation that fosters organizational entropy. This needs to be avoided at all costs since the fragmentation effect can be disastrous. In a battle to remain relevant, coordinating your forces is key.



Opportunity vs. Disruption: The Uncertainty Principle of Business

Not every business has the luxury of being digitally native; they simply don't have a blank piece of paper as their starting point. They must take the time to navigate their people, customers, existing processes, tools, and IT resources through the change. The time this takes makes them increasingly susceptible to disruption, with technology often being the catalyst. For every Blockbuster, there is a Netflix waiting in the shadows. Sustaining a competitive advantage against new market entrants has become even more challenging. Equally concerning is the rate at which regulations are changing to keep pace with advancements in technology. Navigating an increasingly complex legislative and regulatory landscape will be essential. As businesses strive to keep pace, the pace of M&A activity is also increased. Competitors are joining forces to stave off disruptors and acquire digitally native components to accelerate internal transformation initiatives. In both cases, this can throw a wrench in the works—slowing down innovation and switching focus to absorption.

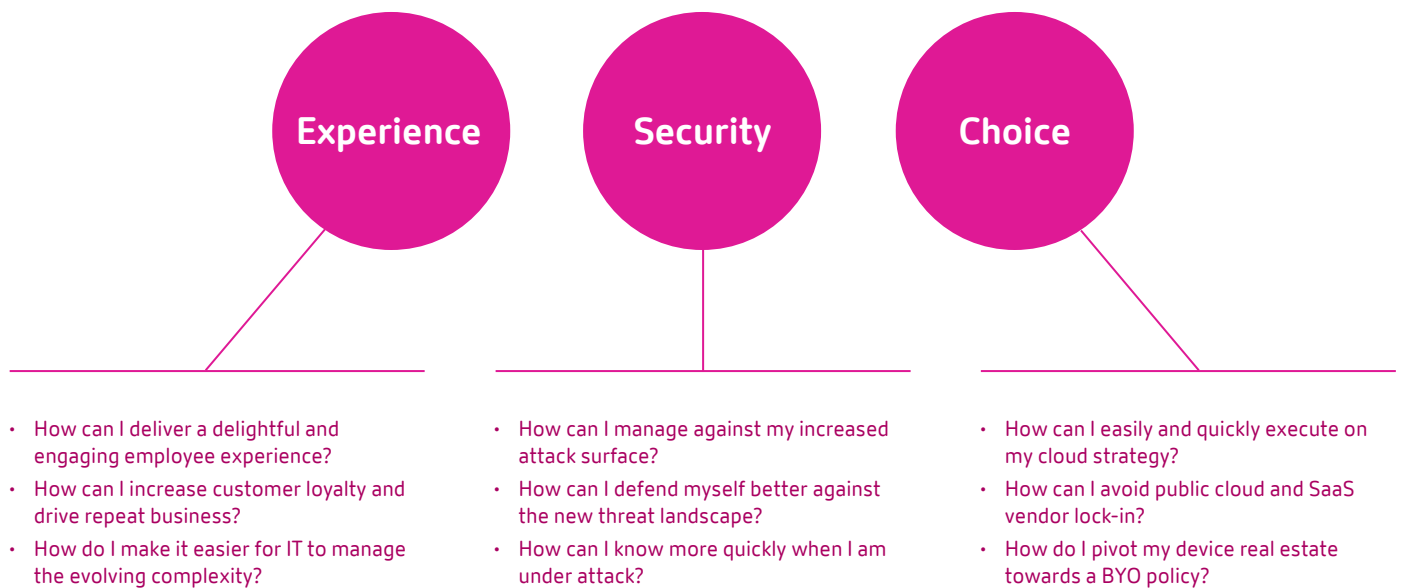
Engaged vs. Disengaged: Employee Experience Matters

It used to be that competitive salaries, benefits, and career development initiatives were enough to find and keep talent. Today, these things are table stakes. To compete and win in the war on talent, companies need to up their game and give employees what they really want: a simple and flexible way to get work done—on their terms. Because right now, it's simply too complex. Technology, yet again, falls under the radar. It is a key driver of the modern **employee experience** and is rapidly becoming the number one focus for CIOs. The failure to address this is slowly killing businesses. Changes in workstyles to support the multigenerational workforce and growing gig economy are already redefining what work means. It's no longer a “place.” The future of work is dynamic and decentralized, where businesses can seamlessly shift their people and digital resources across workflows and put the right insights and information at employees' fingertips. This leads to greater employee and customer engagement, enhancing their overall chances of long-term success.



Citrix: Experience, Security, and Choice Made Simple

At Citrix we think of Experience, Security, and Choice as three of the main desired outcomes for any CIO. While the context for each these can be broad, when we think of these in terms of some of the challenges we've already covered, a common set of CIO imperatives emerge. When speaking with any CIO and asking them what keeps them awake at night, I can guarantee that whatever they tell you will fit in one or more—*if not all*—of these three pillars. Let me prove my point....



Now ask yourself another question. How has the balance of these three pillars worked out for you historically? The challenge, of course, has been where to place your emphasis and understanding. In doing so, that meant something had to give. Consider these as desired business outcomes, but outcomes that have traditionally been biased towards one pillar at the cost of the other two pillars. We've all at some point battled with the Experience versus Security challenge. Having your workforce jump through flaming hoops so you can retain a solid security posture unfortunately turned the experience of doing work into an Indiana Jones movie. You can essentially think of these pillars in terms of logical expressions, where it is either Experience *or* Security *or* Choice. This is clearly not ideal.

What is important is ensuring that your digital business transformation makes no compromise to any of these three pillars—shifting from the current state of “*or*” into the desired outcome of “*and*.” You need all three, in equal measure—no compromises. Not only should there be no winners and losers, it has to be made simple. As the landscape has continued to evolve to fill the gaps exposed in the traditional technology solution-set, it has meant more stuff has needed to be absorbed into an already complex IT environment. Unfortunately, as a result, complexity has increased. With complexity being the enemy of Experience, Security, and Choice, it's complexity that remains the single biggest barrier to digital transformation.

In a World of Firsts, Application First Is What Matters

Perhaps it isn't that obvious at first glance, but what really ties this all together are the applications. The digital transformation journey over the last decade has been a journey of firsts. Mobile First, Software First, Cloud First, Hybrid First, Developer First.... The list is endless and reads like buzzword bingo. What really matters is being Application First.



Application First



Cloud First



Hybrid First



Software First



Developer First



Native First

Enterprise applications drive the execution of business operations and strategy, and consumer applications are often the chief source of revenue for the business. The challenge we all face is fundamentally being able to connect people and things to applications. We now take it for granted that people (and things) can be anywhere, and the applications they utilize can reside anywhere—in other words, the pillar of **Choice**.

We must, however, ensure that the user **Experience** is oblivious to and immune from all of the underlying complexity—behind the curtain, if you will. Many workflows may require a user to dive into multiple applications and all that needs to be completely abstracted from the user. The systems and applications below the surface may be disaggregated and architecturally fragmented, but from the end user perspective, the workflow should be a homogenous unit of work. Doing work has to be easy, not requiring in-depth, expert understanding of the myriad applications that support the given role or set of workflows. Only expose what is required and expose it in a way that is both intuitive and simple to consume. Similarly, the underlying complexity of the network that connects people (and things) with applications should be abstracted. Users should not need to care,

nor make decisions on the options to connect. The network needs to be aware of the requirements of the people, things, and applications in order to deliver the most preferential performance. This often gets termed as “intent” in IT circles. Greater attention to detail needs to be placed on fusing the needs of end user, networking, and applications. These can no longer be considered separate silos. We need to see an end to the traditional blame-shifting games when problems occur. The requirement for a common approach to end to end visibility is self-evident.

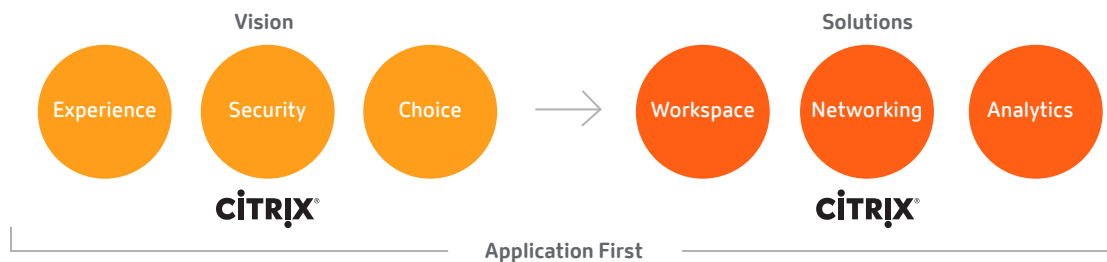
In a much similar way, **Security** needs to be end to end. Slapping endpoint protection on end user devices and loading up the DMZ with firewalls isn't today's answer. Maintaining an effective security posture in today's complicated landscape has led to a patchwork of security solutions and tooling held together by pipe cleaners and bubble gum. Focus needs to be on the applications (and the data they hold). Ensure that the people (and things) are sufficiently trusted to access that data, make sure controls are in place as to how they use it, and ensure that anything in between does not expose any of that.

This, of course, isn't simple in practice. There has to be a better way.

Citrix: There Is a Better Way

At Citrix, we believe there is a better way. Over the last few years, we have been quietly and systematically thinking of this problem and focusing our innovation towards solving some of the critical challenges we've already surfaced.

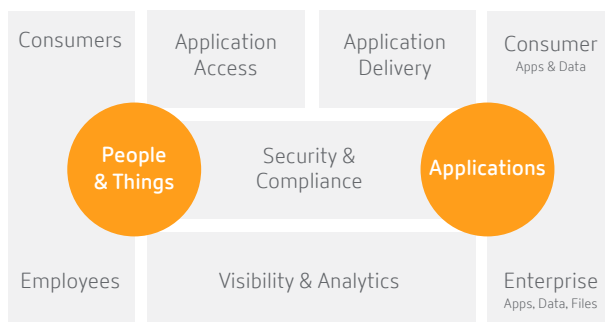
We understand the enterprise exceptionally well. We have been operating in the majority of the Fortune 500 for 30 years and are delighted to say that many of them are customers today. That's why we know that Experience, Security, and Choice matter and that's why these three pillars form the foundation of the Citrix vision.



Citrix has always been “Application First,” but we have pushed the boundaries. Our product development is now focused into three discrete areas: Workspace, Networking, and Analytics, all with fundamental application bias. While each have their unique capabilities, they now share common frameworks for security, visibility, and control. We believe we have created the industry's first and most comprehensive **general-purpose workspace delivery platform**.

The General-Purpose Workspace Delivery Platform

Our workspace solutions have been fully integrated with our networking solutions to deliver a complete end to end platform delivery fabric to connect the workspace to the app space in a secure, intelligent, and performance-optimized way.



Workspace

Delivering the best **experience** for your employees and customers

- All apps (SaaS, Web, Virtual) and files aggregated and made secure within the same workspace experience
- Application abstraction through notification feed and “micro-apps”
- Intelligent and automated: simplifies the ability to get work done

Delivery Fabric

Delivering the most **secure** connectivity fabric for the future workspace

- Unified Application Access and Application Delivery, optimizing performance into the App Space
- Secure access to all apps, data, and files in a single framework
- 360° visibility and Analytics for security, productivity and performance

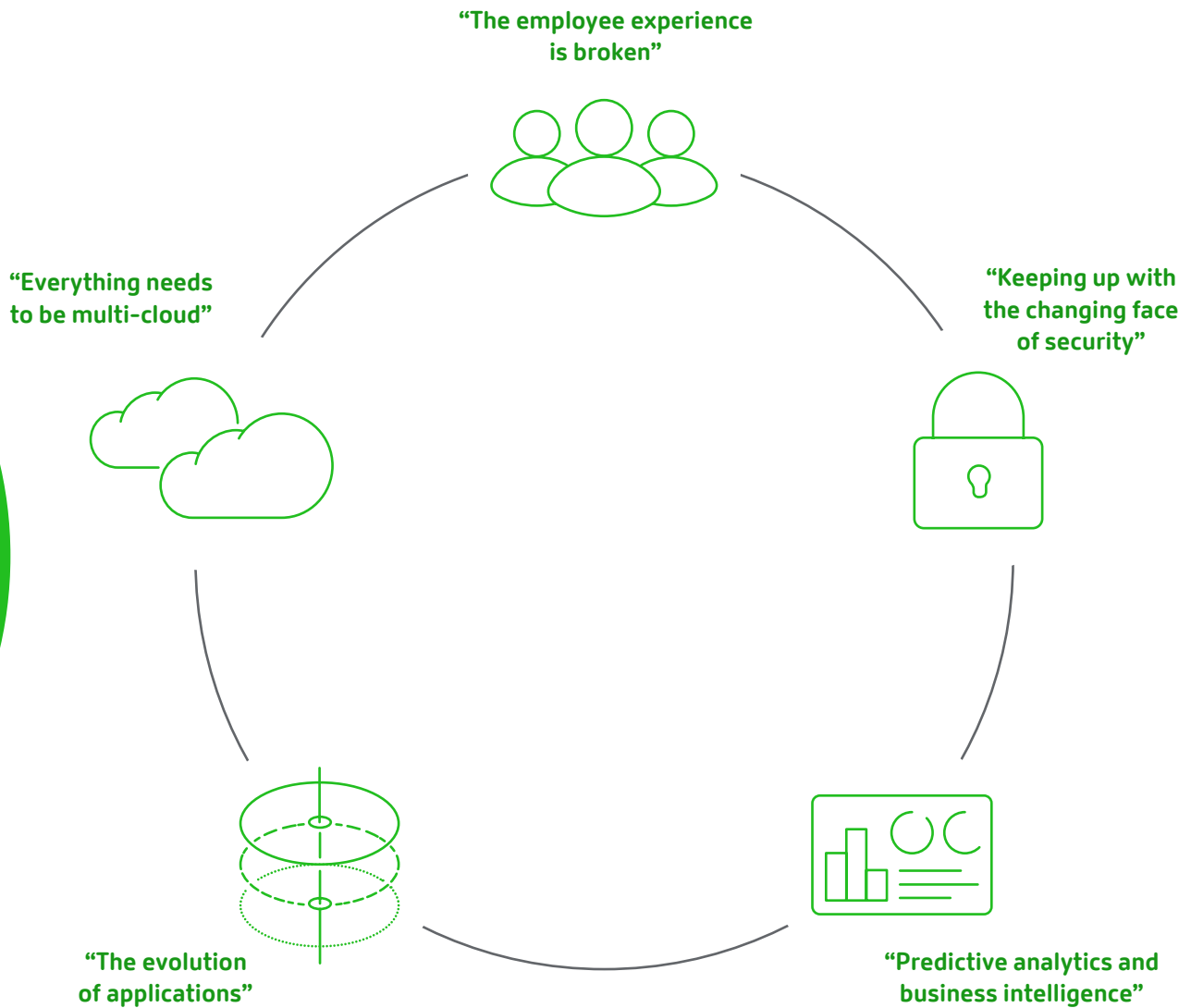
App Space

Delivering the best business **choice** for deploying your applications

- Hybrid, Multi-Cloud delivered securely—define once, deploy anywhere
- Supports enterprise class, cloud native infrastructure DevOps approach
- Flexibility: take capacity anywhere, avoid cloud provider lock-in

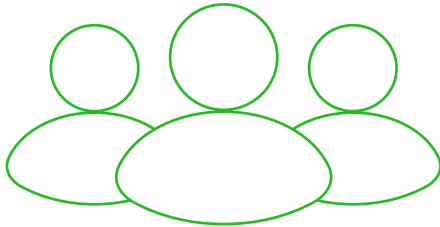
How Citrix Helps CIOs Address Their Top 5 Challenges

In our research activities and customer engagements, we come across the same recurring themes that set out the charter for CIOs navigating the digital business journey...



1. “The Employee Experience Is Broken”

Of the top five recurring themes, this one is regularly at the top of the list. The dissatisfaction of employees who don't have the right tools and resources available as part of their everyday work is pandemic – affecting engagement and ultimately business productivity. According to Gallup, this impacts around 85% of all employees. Too many apps, too much context switching, too many distractions, too hard to use—all of these are contributing factors to the reason why the experience is broken. This is backed up by the Economist Intelligence Unit, who cite that companies providing employees with the right tools to make work more efficient and meaningful not only attract the people they need, but keep them engaged and productive, resulting in major improvements in business productivity.



Experience

“Make data easy to find for me and tasks easier to complete”
“Don't overly depend on me being an expert user of every app”
“Surface the things I need to focus on, reduce noise and distractions”

Security

“Don't make security a barrier to my work, make security frictionless”
“Don't overly depend on me to implement my own controls”
“Make it clear if I am doing something wrong, why, and how not to”

Choice

“Let me decide how I am most productive”
“Let me use the devices I prefer to use”
“Let me be effective wherever I am working from”

Our approach

Employees like to be creative; however, if the tools provided to the end user don't facilitate productivity, the result is less time to be creative and more time spent on process. The Citrix Workspace Intelligence app streamlines workflows by reducing the number of steps required to complete a task. Everything is right there at your fingertips. Let's take a closer look at how Workspace helps improve employee engagement and productivity.

Organize

Get work done your way and access everything you need to be productive in one unified experience on any device with single sign-on. All your apps and data are presented at your fingertips, so you can be more engaged with your work.

Guide

Make the workspace your space. See only what you need, when you need it, with an aggregated view of personalized and prioritized tasks and key insights. Quickly and easily complete routine tasks in your workspace, or use a collaboration tool like Microsoft Teams—without the hassle of switching apps or signing in multiple times.

Automate

Employees spend 20% of their time looking for internal information. Workspace allows end users to work smarter and faster. Make busy-work a thing of the past with a virtual assistant who automates repetitive tasks and simplifies workflows. Get answers fast to questions like, “How many days off do I have?” or “What's the status of my P.O.?” without having to log in to multiple systems.

2. “Everything Needs to be Hybrid Multi-Cloud”

Through our continued engagement and research, there are emerging strategies of using multiple clouds for multiple business needs. This includes choosing more than one IaaS/PaaS provider for reasons such as risk mitigation, performance, compliance, cost, etc. It is also about continued growth in the adoption of SaaS, where many vendors have large-scale, multifunctional clouds in their own right. Since very few customers have the luxury of abandoning their existing on-premises application real estate, it's also about the need for a hybrid architecture that covers their traditional data center and their evolving public cloud footprint, along with SaaS-based resources. In amongst all these approaches, delivering disaster recovery (DR) strategies for critical business applications also needs to remain top of mind.



Experience

- “Make the fact that I have apps and data everywhere seamless to my users”
- “Help my users simply execute workflows across apps in different locations”
- “Make it simple for my IT department to administer this complex environment”

Security

- “Give me consistent security policies across app and data islands”
- “Solve my compliance and regulatory needs across this new landscape”
- “Provide me with common visibility to threats and controls to deal with them”

Choice

- “Make it easy for me to execute on our cloud migration strategy”
- “Avoid me having vendor ‘dependence’ and potential cloud/SaaS ‘lock-in’”
- “Make it easy for me to choose where to put things and then change my mind”

Our approach

Workspace is an integrated solution that allows teams to work more efficiently. Here are a few ways Workspace helps fuel business and IT agility:

Centralized management

Workspace provides integrated services across your entire infrastructure, all easily accessible to administrators. Intelligent analytics provide insights into potential security risks, along with opportunities for operational efficiency, and application and network performance.

Faster onboarding

With Workspace, you can quickly onboard new employees, contractors, or entire offices. Fueling productivity with continuous delivery of apps and data. Workspace also secures access to the apps your users need from the get-go, regardless of their device or network. Instead of building, testing, and launching new applications or desktops in weeks, or even months, Workspace reduces roll out time to days—and in some cases, even hours.

Fewer calls to the help desk

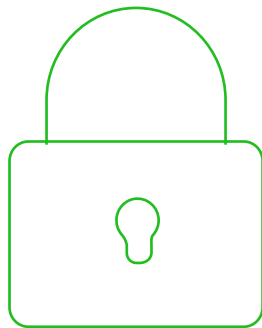
With Workspace's single sign-on, complete with multifactor authentication across any app (SaaS, web, virtual, or mobile), users are less likely to call your help desk. Deep integrations with IT Service Management tools helps reduce time and frustration for users and administrators in both outside-the-box and custom workflows.

Learn and optimize

With user-based analytics, Workspace allows you to gather information about your users' work activities. It then compiles the data into informative profiles and actionable insights so you can reduce security threats and provide your users with a better experience.

3. “Keeping Up with the Changing Face of Security”

This is much more than the notion that the traditional perimeter is disappearing. Traditional postures did a lot to keep people out but were very ineffective once the bad actors had breached the perimeter. This is more about the changing nature of the type of attacker and the weaponry that they are using in today’s reality. Today’s bad actors have deeper pockets and greater motivations to do their best work. Today’s hacker is far more likely to know more about AI and Machine Learning than the average business. This ‘Dark AI’ movement is already phenomenally advanced and exploiting the gaps that digital business transformation exposes for financial gain. When employees make simple, stupid mistakes, a gap opens. A malicious insider (for example, a disgruntled employee or otherwise) can wreak havoc. With concepts emerging such as Zero Trust, the emphasis has switched from an outside-in line of defense to one that breaks down the mere concept of a line and switches to a “Never trust, always verify” model of security.



Experience

“Provide IT with accurate visibility across the end-to-end real estate”
“Provide tools that can define policies once, then deploy them everywhere”
“Make it so the user experience is minimally affected”

Security

“Provide me the right tools to combat new threats and threat vectors”
“Allow me to use ML/AI to automate threat hunting and resolution”
“Help me understand where the risks are and address them early”

Choice

“Permit me to choose best of breed security solutions, where required”
“Help me bridge between old and new to protect my existing investments”
“Harmonize the cloud security toolsets into my environment”

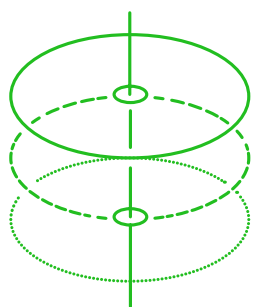
Our approach

Anyone who has responsibility for people, process, technology, or strategy at a material level has privileged access and is generally a target for external threats such as phishing, ransomware, identity theft, social engineering, cyberterrorism, hacktivism, and so on. Privileged access needs to be managed without adding complexity to the environment as complexity is the enemy of security, productivity, and cost. Citrix offers an identity-enabled and persona-enlightened privileged workspace that brings meaning to work by automating and augmenting the context of work for highly privileged workers. It integrates people, process, technology, and strategy, bridging the physical and cyber worlds.

Workspace is built on the Zero Trust model and allows customers to apply the appropriate delivery method for the resource in question. Zero Trust helps deliver data securely by offering contextual controls to your end users depending on where they are, the device posture, their identity, and their authorization. Workspace can dynamically change the level of access that the user has to these tools when the context changes, and it can tighten or relax controls as needed. The user can use single sign-on and access all the resources from one place. In addition, Citrix Analytics learns typical user behavior and helps quickly identify anomalies and risks with proactive notifications and automated actions, thereby enabling IT departments to mitigate potential risks.

4. “The Evolution of Applications”

Enterprise application development is going through a profound change, both in terms of methodology (waterfall > agile) and technology (monolith > microservices). Most CIOs have active programs attempting to institutionalize Development and Operations teams. Even though we see SaaS as a major strategy for many companies, it often goes hand in hand with continued investment in “homegrown” applications. Business resources are being spent on maintaining or refreshing old critical business applications, app refactoring to enable mobile use cases, and developing API strategies to allow new lightweight integrations and extended use cases for traditional applications. This brings great promise, but also new challenges for DevOps as they come to grips with fundamentally new technologies (containers, PaaS, serverless)—each with their own ecosystems and maturity levels.



Experience

“Deliver users a consistent look and feel across the entire app space”
“Expose only the parts of the app the user really needs to do their work”
“Abstract the delivery of apps from the underlying app complexity”

Security

“Protect my entire app space with a consistent security approach”
“Simplify security policy administration across different dev environments”
“Equally protect my apps from internal as well as external threat actors”

Choice

“Don’t constrain my app development strategy to a single cloud provider”
“Ensure that I have the flexibility to work with my choice of PaaS provider”
“Give me the freedom to choose my own DevOps toolset and work with it”

Our approach

We believe our solution addresses the six requirements that are most critical for facilitating a holistic approach to application delivery that extends seamlessly from your data center(s) out to the public cloud and across the WAN to your branch offices and remote sites.

End-to-end visibility into network and internet conditions

All of the scalability and flexibility enabled by the cloud are wasted if your applications fail to perform optimally or your data security is breached. Our solution provides the deep visibility of internet conditions needed in order to deliver a great experience to end users.

Real-time analytics on network performance

To ensure application optimization and uptime, our app delivery solution provides real-time analytics with actionable intelligence across your hybrid or multi-cloud environment.

Automated application deployment

As applications continue to move to the cloud, the automation of support services is becoming increasingly important. Our solution integrates with workflow management systems to automate tasks such as lifecycle management and provisioning.

On-demand scaling

Workloads are not constant. They can spike or plummet. Our application delivery infrastructure can scale and make use of cloud capacity where its most needed.

Orchestration for the cloud

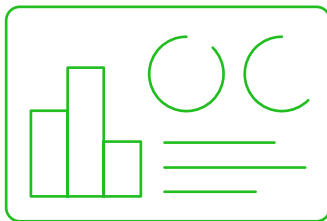
As the data center continues to move towards a software-defined model, networking services need to be orchestrated so that your application infrastructure can be deployed on demand. To handle this task, our solution is API-driven so that it can integrate seamlessly with orchestration platforms and leverage their automation power inside and outside the enterprise perimeter.

Flexible license management

Because most application delivery solutions employ permanent/static licenses that allow a specified throughput, some devices may be underutilized or under-licensed. To get the required flexibility, scalability, and resiliency from your hybrid or multi-cloud environment, our licensing model allows the pooling of license and capacity. This allows you to easily transition capacity when needed.

5. “Predictive Analytics and Business Intelligence”

Businesses aspire to be far more data-driven, and with Machine Learning and Artificial Intelligence, the means now exist to extract, assimilate, process, and make sense of that data. However, the forces of data disaggregation are pushing businesses to rethink traditional architectural approaches to the existing master data model and underlying data integration requirements in an attempt to tie all this back together. This tinges the promise of analytics with a harsh sense of realism. We do, however, anticipate the “death of reports”—*in the traditional sense*—and a move to employ predictive analytics as the prime source of business intelligence in replacement of “rear view mirror” reporting. Beyond this, analytics are also being employed to assist other key business challenges: identifying and addressing security risks, improving user experience proactively, measuring employee engagement and productivity, and optimizing infrastructure costs.



Experience

- “Make it intuitive to expose only the data my role cares about”
- “Permit the monitoring of employee engagement and productivity”
- “Easily optimize overall performance and costs of IT”

Security

- “Quickly identify and address security risks and vulnerabilities”
- “Closed-loop approaches to tie security visibility and controls together”
- “Ensure that data integrity and sovereignty are enforceable”

Choice

- “Permit existing investments to work hand in hand with new analytics tools”
- “Cloud-based service rather than having to employ own on-perm technologies”
- “Collaboration with Public Cloud analytics resources—data sharing”

Our approach

Today, most environments leverage multiple tools to gain insights and visibility into performance issues, capacity trends, and potential security threats. This portfolio of tools leads to complexity and challenges in determining a root cause and also leads to substantial costs. Data coming from the various systems have to be normalized, risks need to be defined and custom remediation actions need to be created. Citrix Analytics simplifies this challenge in the following ways:

Detect threats with user behavior analytics

Citrix Analytics allows you to sense, analyze, and proactively respond to these security threats before they happen. As users access networks, apps, and data, Citrix Analytics uses machine learning to create a risk profile for each user. If a user exhibits anomalous behavior, like unusual usage of an application or excessive file sharing activity as part of potential data exfiltration objective, Citrix Analytics automatically takes action to dissolve the threat.

Prevent access to malicious sites

When someone tries to access a malicious URL, risk indicators are generated and administrators are notified. The system can then take a number of proactive actions to mitigate the risk.

Protect sensitive content with secure content collaboration

When the sensitive files are accessed, Citrix Analytics is alerted and assesses the risk. Appropriate actions can then be taken against users if they are deemed to be compromising corporate assets or doing other harm.

5. “Predictive Analytics and Business Intelligence” (cont.)

Thwart ransomware attacks

Ransomware attackers often target devices or accounts, replacing existing files with encrypted versions. Citrix Analytics can quickly filter out behavior that resembles ransomware and activate an automated response, including logging the user out in order to halt the attack. In addition, Citrix Content Collaboration can provide recoverable versions of compromised files.

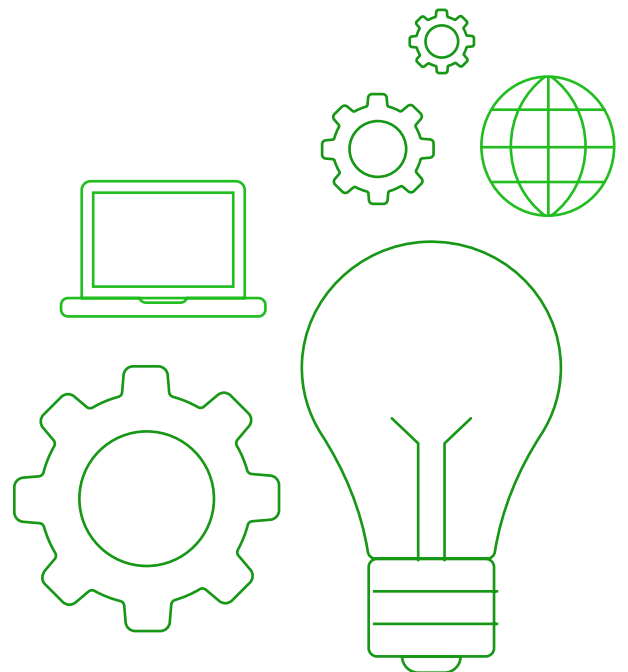
Boost visibility

Citrix Analytics collects and aggregates metrics on users, applications, endpoints, networks, and data to provide comprehensive insights into user behavior across the entire Citrix digital workspace.

Improve user experience, application performance and infrastructure visibility

Most organizations struggle to determine the root cause of application performance issues, especially when using several disparate tools to manage performance across virtual apps and desktops, SaaS applications, mobile and native apps, and other solutions. An abundance of tools adds an unmanageable level of complexity to purchasing, licensing, deployment, updates, and upgrades. By operating in break/fix mode, it's challenging to get ahead of issues, let alone prevent them altogether. What's missing is end-to-end visibility across your environment and direct user experience feedback.

Performance Analytics provides a holistic view of user experience and infrastructure performance across all the disparate Citrix environments within the organization. User-centric experience scores, application, and infrastructure performance scores are made available through advanced analytics. Machine learning is leveraged to determine the user experience score, understand user performance metrics, and identify potential deviations from the norm. The actionable insights provided enable customers to proactively handle, detect, and address user performance and infrastructure issues, improve application performance, and optimize IT operations. Performance Analytics helps confirm that the current capacity management strategy is meeting your performance goals.



This is the future of work, and Citrix has made it happen.

For more information on the Citrix Workspace, visit www.citrix.com/workspace

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