



Digital Workspace Reliability Makes Dollars & Cents

Leveraging Technology to
Deliver Great Experiences



At the intersection of workspace resilience and employee satisfaction lies better business outcomes and higher customer satisfaction.

The overwhelming pace of technological change can undermine the system stability, performance, and security of any business, as well as degrade the employee experience. Still, the financial services industry comes with its own set of unique challenges that not only threaten operational efficiency and peak financial performance but can also play an indirect role in declining customer satisfaction through poor employee experience.

Digitalization driven by consumer demand for self-service everything and a desire for 24/7/365 convenience has left an indelible mark on banking and brokerage service providers. While most, if not all, financial services providers had already been developing digital transformation strategies before the global pandemic, it hastened the rate at which those projects would be implemented. IT departments have been challenged to provide for a new influx of remote workers while maintaining the security and compliance demanded by regulating bodies and providing a seamless digital workspace experience.

The need for increased technology spending, the time and hard-dollar costs of maintaining regulatory compliance, and high employee turnover are just a few of the unique challenges facing financial services firms. Of all these, perhaps the most overlooked is employee satisfaction. Financial services have an 18.6 percent turnover rate – the highest of any other industry, according to a Compdata survey.¹ The last thing any financial services organization wants or needs is for poor system performance to interfere with the ability of employees to do their jobs efficiently and with satisfaction. Frustrations with degraded workstation performance and system conflicts that stop them in their tracks or keep them from performing necessary security patches and updates affecting regulatory compliance only add to the problem.

¹Hppy, "The Millennial Turnover Problem in the Financial Services Industry"

The business impacts of degraded digital workstation performance include:

- ✓ Longer release/upgrade cycles
- ✓ Higher customer dissatisfaction
- ✓ Reduced employee retention
- ✓ Heightened security risks
- ✓ Higher IT incident escalations
- ✓ Lost employee productivity
- ✓ Too much IT and end-user firefighting

While it's clear that financial services leaders understand the relationship between workspace resilience, employee satisfaction and business performance (in a recent PwC survey, 82 percent cited operational resiliency as a “top 3” change priority²), few have a clear grasp on how to leverage it as a competitive advantage.

Executive leadership may be surprised at just how important Digital Employee Experience (DEX) is to employee satisfaction and retention—and, by the transitive property, to account holder satisfaction and bottom-line performance. IT can hugely impact DEX by ensuring optimal digital workspace performance while at the same time optimizing and maximizing the financial institution's current technology investments across the entire lifecycle.



²PwC, “Productivity 2021 and beyond: Five pillars for a better workforce”

What is Digital Employee Experience (DEX)?

DEX encompasses the relationship between employees and their digital workplace tools regarding effectiveness, efficiency and engagement.

When DEX is low, distractions from poor tech performance create digital friction, which Gartner defines as “unnecessary effort an employee has to exert to use data or technology for work.”³

The latest research is just starting to uncover the direct relationship between good employee experiences and better business outcomes. According to Deloitte, organizations ranked in the top 25 percent of employee experience are over one-and-a-half percent more likely to achieve better customer outcomes, 25 percent more profitability than organizations in the bottom 25 percent, and double the Net Promoter Score® for customer satisfaction.⁴

Login Enterprise is Login VSI’s solution for ensuring digital workspace performance to help IT positively impact DEX. This human-centric automation platform validates the impact of the change from the end user’s perspective on the whole system (not just one application) – allowing financial organizations to increase efficiency and reduce costs. Digital workspaces become more resilient, and employees remain happy and productive.

³Gartner, “How to Make Your Digital Workplace Happier, Faster and Smarter,” November 12, 2021

⁴Deloitte, “The Digital Workspace Reimagined” Issue 1



Four Major Challenges in Financial Services Computing

It's a constant battle to keep pace with technological change, and the volume and cadence of changes are overwhelming digital workplace and end-user computing teams—causing more disruption and slowing innovation.

When technology is slow or fails, it interrupts, distracts and disengages even the best employee—impacting customer satisfaction, retention, and ultimately, revenue. Given the current operating environment of financial services firms, it's essential to eliminate as many obstacles to success as early as possible.

The challenge, then, is how to balance speed, reliability, and rising expectations.





One key area for improvement that can significantly impact employee retention, customer satisfaction, operational efficiency—and ultimately your bottom line (and can achieve significant impact in a short amount of time)—is DEX.

Here are four common computing challenges that, if not met, threaten DEX.

- 1** Dealing with an Increasing Rate of Change
- 2** Proactively Detect and Fix Issues that Impact Quality Service
- 3** Release OS and Application Upgrades into Production Faster
- 4** Optimize and Extend the Life of Existing Computing Environments



Challenge 1: Dealing with an Increasing Rate of Change

You need an automated way to keep pace with an increasing volume of routine system changes and updates and to analyze their impact on end-users before implementing them.

Digitalization has been happening at a break-neck pace, and the pandemic has only exacerbated the need for continuous, seamless operations in a rapidly changing computing environment. Due to the increasing number and complexity of systems in use—and the continual patches and updates that come with them—it's essential that the impact of these changes is detected and mitigated before end-users are affected.

The potential costs associated with failing to identify and resolve issues to minimize incident escalations proactively can be staggering:

- \$1.27M spent annually on escalations that could be avoided⁵
- \$3.36M lost due to engineers focusing on non-critical tasks⁶

Testing planned changes in pre-production will ensure no negative impact on end-users—and no disruption to business as usual. The organization will also save time and money by avoiding unnecessary, reactive IT fire drills and ensuring compliance with regulations.

⁵Digital Enterprise Journal, "The Total Business Impact of IT Performance," Sept. 2021.

⁶Digital Enterprise Journal, "Identifying Effective Digital Employee Experience (DEX) Management Solutions," Oct. 2021.

Case in Point

One of the Largest Banks in the U.S. Speeds Image Testing Using Automation



We don't make any changes to our VDI environment without vetting them through Login Enterprise first. It enables us to test in advance any changes to golden images used around the world, as well as manage capacity planning for any new applications.

--Citrix IT Process Owner

With thousands of end-users accessing a wide array of enterprise software applications in a virtual computing environment, the bank needed a faster way to test golden image changes before go-live.

Testing image changes assures the ongoing performance of various applications at scale, with no adverse impact on the end-user experience. Multiple departments also had to sign off any golden image changes before their implementation, so the increasing amount of time and personnel hours necessary to test image changes and gain department signoffs slowed down efficiency.

The bank used Login Enterprise to test the impact of image changes on actual end-user experience. Unlike other tools, the platform's virtual user technology simulated real-world users performing real-world tasks and measured the time required for each action within the end-user interface. Login Enterprise accurately measured the quality of end-user experience to 10,000-15,000 virtual users. The results were benchmarked and compared with current production performance and then shared with department leaders who could approve image changes more quickly and confidently.

Challenge 2: Proactively Detect and Fix Issues that Impact Quality Service

You need to continuously monitor individual digital workspace performance to proactively determine issues in the whole system before performance degrades.

The modern reality is financial services firms rely on the expertise of numerous specialized third-party IT providers for critical systems architecture, platforms and point solution applications. Service level agreements (SLAs) define the expectations for the performance of any one given service. Still, typical SLA metrics only report on the availability of machines, not the performance of the application or the end-user experience, which is the metric users truly care about.

Administrators of central desktop infrastructures frequently use advanced monitoring software focused on the infrastructure and give information about the load of the system, such as CPU, memory, storage, network, and other system statistics.

But while all those measurements may be acceptable on the surface, it's possible for the helpdesk to be overwhelmed with unsatisfied end-users. Because they give insight into the quality of the system when real users are present, it is reactive by nature. A proactive approach based on predictions of user behavior is close to impossible because real user behavior is always variable.

To deal with this, organizations should deploy a specialized 24/7 active monitoring solution based on synthetic users that can detect problems before the real end-users come in and even predict when system performance will begin to degrade, so IT can proactively address the issue before users experience hiccups.



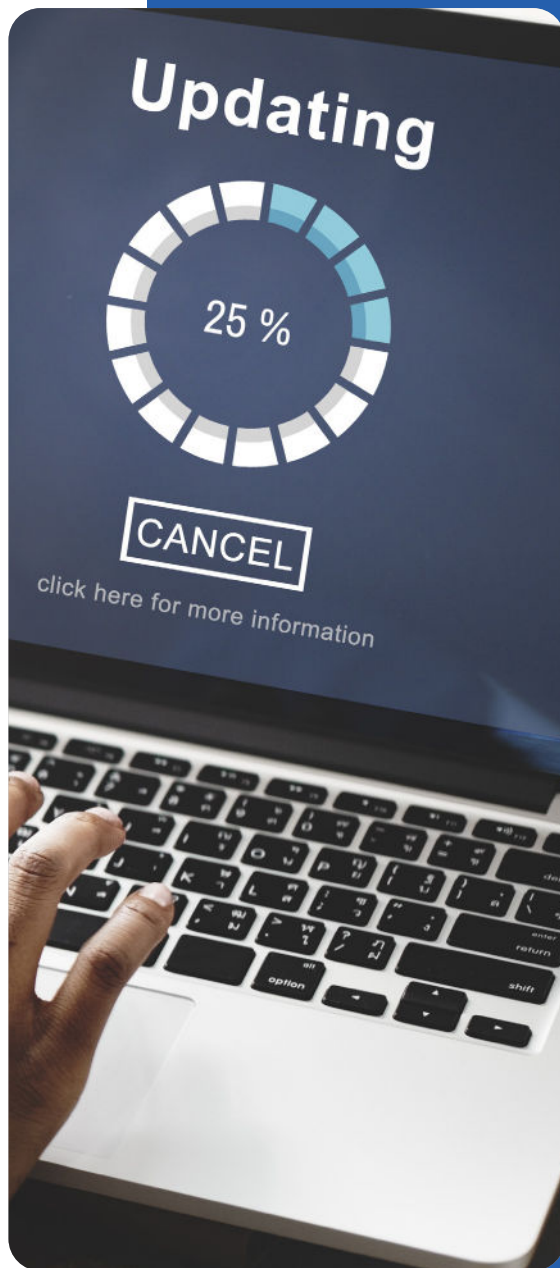
When Citrix changed its network configuration to include a new network protocol, it resulted in one of the firm's international office locations being unable to connect to any of their Citrix Virtual Delivery Agents (VDAs), taking thousands of users offline.

Having learned its lesson, the firm implemented Login Enterprise to proactively detect and prevent issues before they impact end-users.

Using the platform, the firm now initiates “crack of dawn” testing daily, where branches and call centers “check in” through Login Enterprise's automated testing workflow to determine issues before real users start working in these locations.

Case in Point

Top Global Financial Services Firm Proactively Monitors Performance After Suffering Major Outage



Challenge 3: Release OS and Application Upgrades into Production Faster

You need to get OS and application upgrades into production faster, even in the face of ever-increasing volume.

If your organization is faced with a major upgrade to your operating system or a business-critical application—like the core processing system or digital banking software—or contemplating a move to the cloud or migrating from a physical to virtual environment, time is money—and disruption and delays are expensive. Speedy implementations also help your organization leverage new or upgraded features and functionality in existing applications so end-users can take advantage of them sooner and your organization can maximize the return on its technology investments.

Your organization must understand the impact end-users will experience when going about their essential daily activities in the new environment. IT will need a robust set of measurements to build confidence in the migration or upgrade plan.

Testing changes on deck in pre-production will ensure proper baselining/ rightsizing of the environment and early detection of potential problems. Testing also helps control unnecessary technology expenditures since IT will be able to choose the perfect-sized environment needed to deploy the changes before making final purchasing decisions.

When one top 10 U.S. financial institutions with over \$500 billion in assets faced growing pressure on human and budgetary resources in the face of much-needed hardware and software upgrade projects, it turned to the Login Enterprise Platform to relieve it.

In addition to the usual volume of updates and patches faced by IT, the bank suffered from poor employee experience due to degraded workstation performance from old machines and the need to implement a high volume of application upgrades. Productivity was slowed, and IT staff was hesitant to install required updates and patches, opening the bank to an increased risk of attacks from malicious software.

Manual efforts and increasing helpdesk requests meant the bank faced slow response times, increased downtime, and the need for additional resources.

Login Enterprise helped the bank save valuable resource time and eliminated the need for additional staffing. The platform empowers the bank to establish objective baseline performance for critical applications and tests proposed application changes against that performance to ensure continued service levels are maintained and to find potential issues in a test environment instead of a live one.

Login Enterprise also enables the bank to deploy changes and upgrades into production much more quickly, meaning the bank stays compliant and better protected.

Case in Point

“Top 10” U.S. Bank Holding Company Curbs Growing Pressure on Resources Using Automated Testing



Challenge 4: Optimize and Extend the Life of Existing Computing Environments

Manage digital workspace lifecycles more efficiently and effectively and deploy with confidence. Select the best provider at the best cost while achieving optimal performance from implementation to retirement.

Whether switching one provider for another in your technology stack or leading a migration of desktops to the cloud, you must understand the impact end-users will experience when using their business-critical apps in the new environment before making final decisions.

Testing your migration target in pre-production will ensure proper baselining/rightsizing of the environment and provide early detection of any problems, ensuring optimized performance while reducing the total dollars per desktop expenditure.

Building and executing these plans enable comparisons of the incumbent technology versus the target platform. Once you get visibility into the performance of these various scenarios, you can ensure your migration won't negatively impact the digital workspace and that you've selected the best configuration to optimize performance.

Case in Point

“Top 5” Bank Finds Perfect Balance of Per-User Cost and Upgraded Performance

“At our size, the vendors involved will go around the evaluation team to executives and claim they weren’t given a fair shot. It’s essential to have a uniform and consistent set of tests, so just in that regard, Login Enterprise has been hugely valuable.”

-- Product Owner for Virtual Computing

The largest U.S. financial institution with over 100,000 end-users sought to modernize its existing VDI environment, it turned to the Login Enterprise Platform to assess the new system’s impact on performance against the cost-per-user to determine if upgrading was worth the investment.

The bank developed a set of personas that consisted of defined, detailed workflows through their applications. The bank established baseline performance metrics by running a load test against their incumbent VDI environment to establish a starting point from which to measure. Isolating the best-performing selection on a price-per-user allowed the bank to zero in on their most powerful candidate solution before the next testing.

While a subset of critical applications can be used to baseline performance and enable comparative measurements before moving the chosen solution into production, the bank wanted to understand what would happen the morning of “Go Live.”

In the case of VDI, this involved building out the complete stack, including the security layer, testing individual applications and the entire “release” image, and finally doing so under scale and soak conditions. Once completed, the bank felt confident in the deployment, and the first phase of cutover migrated 20K users in a day without issue.

Login Enterprise Platform

The Login Enterprise Platform, a digital workspace reliability platform, provides a human-centric and automated approach to objectively measure experience and deliver immediate insights into the impact of change. **Your digital workspaces become more dependable, and your employees remain happy and productive by focusing on three key tenets:**

Full coverage of the digital workspace

Application and infrastructure performance are inherently intertwined and require a solution that evaluates the entire experience.

Your applications are delivered to users through various technologies, such as Citrix Virtual Apps and Desktops, Horizon Cloud, or Azure Virtual Desktop. Application delivery and lifecycle management can have profound impacts on user experience. Login Enterprise ensures optimal interoperability.

End-to-end observability

Subtle changes in pre-production and production create unpredictable results and require a solution that observes and compares both for higher reliability.

Automated change processes

Adapting to constant change requires a solution that increases efficiency through automation that mimics real user behavior.

According to Deloitte, continuous monitoring and end-user experience measurement are essential to achieving the pinnacle of positive workforce experience and positive business outcomes by being a digital workplace leader.⁷

⁷Deloitte, "The Digital Workspace Reimagined" Issue 1



Industry Benchmarks

Create consistent benchmarks that aid with technology evaluations and change impact decisions

Zero Impact

Robotic users run at any time, anywhere and with no agent footprint

02



01



03



Flexible Automation

Schedule once, daily or weekly, or continuously for 24x7x365 coverage

04



Low-Code Workflows

Workflows mimic real-user behavior with support for business-critical applications, and productivity/collaboration tools

06



Reporting and Insights

Real-time dashboards provide insights on how your digital workspaces and applications are performing

05



Broad Ecosystem Support

Prebuilt customizations and integrations for the most popular VDI, DaaS and Cloud platforms -- VMware, Citrix, Microsoft, Nutanix and more

07



Proactive Alerts, Faster MTTR

Define thresholds for proactive issue notification and share logs/screenshots for faster remediation

Change Impact Testing and Analysis

Automate your digital workspace change processes to release faster with confidence, eliminate unplanned issues in production, and stay compliant.

- **Deploy changes with confidence**
Shrink your change backlog from days to hours with automated pre-production testing.
- **Isolate issues within a planned set of changes**
Uncover unintended consequences by evaluating the impact of change across your full environment.
- **Ensure a consistent experience from pre-production to production**
Leverage the same tests in both environments to catch issues before they reach end-users.
- **Maintain security and compliance**
Facilitate the timely rollout of critical patches and validate security policies and endpoint security solutions work as designed.

Proactive Issue Detection and Alerts

Continuously monitor, alert, and respond to the performance issues from the end user's point of view.

- **Detect problems before they impact users**
Monitor performance—all day, across all locations—without the need for agents or users to be present.
- **Stay ahead of creeping degradation**
Analyze every change so that gradual deteriorations are detected well before they slow down end-user productivity and disrupt normal operations.
- **Stay on-plan and on-budget**
Understand when it's time to evaluate additional tuning or new hardware required to maintain optimized performance.
- **Consistently deliver great experiences**
Generate Service Level or Experience Agreement reports to satisfy internal management reviews or provide operational reviews to service customers.

OS and Application Modernization

Eliminate roadblocks to delivering better services faster for employees and customers alike.

- **Update and migrate with confidence**
Easily validate thousands of applications to ensure they work on a new Windows build or in the cloud.
- **Streamline application upgrades and migrations**
Identify migration problems, often ahead of time, and review and analyze the data you need to make rapid decisions and take corrective action in real-time, saving time and money.
- **Simplify end user acceptance through automation**
Transition from manual feedback loops and simulate their requirements for rapid, continuous testing. No waiting – just results.

Workplace Planning and Optimization

The most expensive solution does not always equate to better user experiences.

- **Eliminate guesswork when making technology decisions**
Leverage industry benchmarks to objectively evaluate performance and compare potential VDI, DaaS or Windows® systems based on your unique technology stack.
- **Streamline and ensure smooth technology migrations**
Confidently accelerate your migration with insights relating to performance and user experience.
- **Guarantee platform availability for office and remote workers**
Continuously monitor accessibility and availability from a global perspective at any remote location.
- **Extend the life of existing investments**
Established benchmarks help evaluate whether incremental investments are sufficient or build a case for a major upgrade.

Login Enterprise Platform for a winning EUX strategy

With an established track record, Login VSI is trusted by these top financial services organizations around the world:



Ready to begin your Digital Employee Experience journey?

Learn more about how a [digital workspace reliability platform](#) can be your competitive advantage.

Want to learn more about how Login VSI can help your organization?
[Check out our blog.](#)

Ready to see more?
Request a [live demo](#) of the Login Enterprise Platform

[Get in touch](#) with the Login VSI team.



USA +1 844 828 3693
EMEA +31 20 705 1200



www.loginvsi.com
info@loginvsi.com



USA
300 Tradecenter, Suite 3460
Woburn, MA 01801

EMEA
Maassluisstraat 2
1062 GD, Amsterdam, The Netherlands

