Aligning Your Network Operations Plans with your Financial Services Business

Overcome the skills gap, maintain compliance, and gain operational efficiency to ensure you're ready for what's next



NetBrain

Preventing service outages and degradations lowers your operational costs and reduces risk.

Reacting to problems takes dramatically more time, resources, and expense than preventing those problems from occurring in the first place.





Gain Network Resiliency at Scale

IT networks are the central nervous system that allows financial and banking institutions to optimize service delivery in the highly-competitive financial services market. Mitigating risk and maximizing efficiency is paramount, but many organizations have yet to adopt advances such as automation in their networks.

Current State and Market

With change and volatility being the norm, financial firms must build for resiliency to weather the uncertainty ahead. Future-ready digital operations means embracing automation to deliver new digital services.

The proliferation of tools required to manage the complex landscape of fragmented cloud, SD-WAN, SDN, virtualization, and traditional IT systems has surged, all while contending with a growing sea of regulatory requirements.

The typical financial organization must, on average, deal with

223

regulatory developments

every day, according to Thomson Reuters.

According to a study done by Wolters Kluwer

54% of U.S. banks

are concerned with their institution's ability to keep track of changing regulations.[1]

Efficient, risk-averse, and resilient network operations are critical to not only survive but thrive in this resource-constrained era.





Overcome the IT Skills Deficit

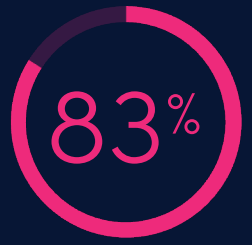
Retaining skilled employees and increasing the talent pool has become more difficult after the pandemic and The Great Resignation.

> The labor participation rate currently remains
>
> **1.1** percentage points
>
> below pre-pandemic levels, with limited signs of a rebound in the near term according to the Bureau of Labor Statistics.[2]

A New Automation Frontier

The age of automation is already upon us. It's transforming us in ways we never imagined were possible.[3]

The Investment Push Continues



of banks are increasing operations automation budget in next 12-24 months

Banking LOB budget increases for operations automation in the next 12-24 months [4]

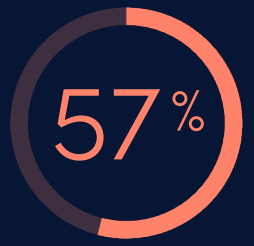
- 39% Increase 1%-9%
- 28% Increase 10%-24%
- 15% Increase 25% or more

Banking operations automation budget next 12-24 months

- 39% Increase 1%-9%
- 28% Increase 10%-24%
- 15% Increase 25% or more
- 10% About the Same
- 6% Decrease 25% or more
- 1% Decrease 1%-9%

Financial IT organizations must adopt automation capabilities that replace manual and repetitive processes with proactive prevention and visibility across cloud, virtual, software-defined, and traditional networks to stay nimble, maintain compliance and improve service delivery while leveraging human intelligence to scale faster.

According to respondents to IDC's WW Industry CloudPath survey (May 2020),



of banks

currently run hybrid environments consisting of public and private cloud as well as traditional on-premises deployments.

Yet fewer than



of the responding institutions

have implemented tools to track and resolve disruptions to this critical infrastructure.[5]

But, the choices in the market are vast and confusing - ranging from your network hardware vendor to open source to a plethora of low-code startups.



Despite the proliferation of tools, most enterprises would agree that they already possess subject matter experts with the knowledge and experience needed to solve any network problem or operational issue. The challenge is they cannot easily digitize and automate that knowledge at scale.

The two biggest challenges to implementing an automation-centric approach to scalable network operations are:

1) the limited visibility of the entire network, with performance and configuration detail

2) the lack of a means to capture problem solving expertise and expert knowledge with a proven no-code automation platform



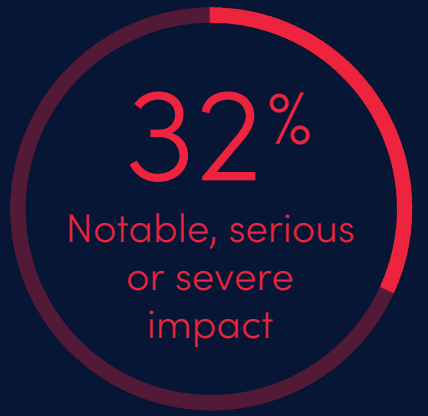


No-code network automation offers a fundamentally different approach to financial IT services by:

1. Scaling NetOps faster without adding skilled personnel to develop and manage heavy-code technologies
2. Reducing the risk of security breaches and maintaining configuration design compliance
3. Preventing serious outages and their business impacts including access to money
4. Providing visibility with the ability to automatically map and document the entire network

Around the World, Financial Entities Regularly Suffer Digital Outages...

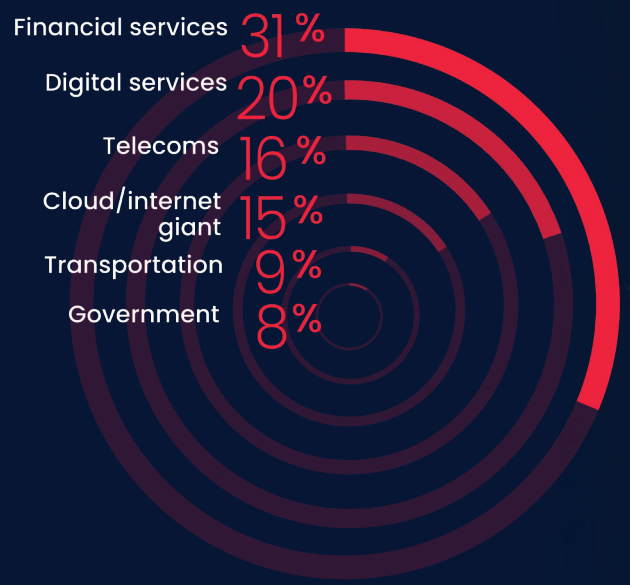
Significant/severe outages are not uncommon in finance



How would you classify the most significant outage that your organization has had in the past 3 years, either in your own site or a third-party provider site? [6]

5. Eliminating configuration drift and the fear of making erroneous changes to the network that could have disastrous consequences. For example, fear of touching legacy firewall rules even though outdated security policies cause vulnerabilities.
6. Leveraging a single source of truth with full understanding of a hybrid-cloud environment to empower collaboration and eliminate siloed operations teams, like networking and security, that have interdependencies
7. Understanding the requirements needed from a trusted technology partner without disrupting the business during implementation

Most significant publicly reported outages by sector, 2019-2021



Publicly reported outages by sector (significant/serious/severe) 2019-2021; [7]

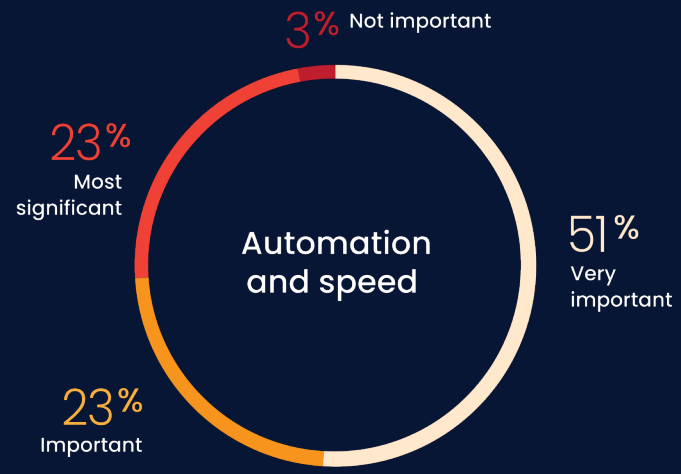




Imperatives for Operational Network Transformation

The key to making a strategic operations transformation successful is to intelligently automate network problem diagnosis and outage prevention at scale.

Overall, what do you consider to be the most important benefits of fintech for your organization?





Navigate regulatory requirements like a pro

Imagine not having to worry about new regulations or whether you'll be prepared for your next audit. Keeping up with compliance mandates, steep regulatory penalties, cybersecurity threats, and maintaining uptime for 'real time' platforms (like trading) with manual operations is near impossible.

By 2024

annual investment on regulatory compliance reporting will be

$2.7 billion[8]

Be protected from the unintended consequences of change management

In the finance world, change equals risk. How does adding a new device affect your network? How can you ensure its configuration follows company standards? How often should you verify its compliance after installation?

According to Uptime Institute, more than



of all data center **outages**
are caused by
human error

either incorrectly applied changes, or changes that were applied correctly but for some reason not what was intended. This contrasts with what most people assume is the main cause of outages - hardware or software failures.

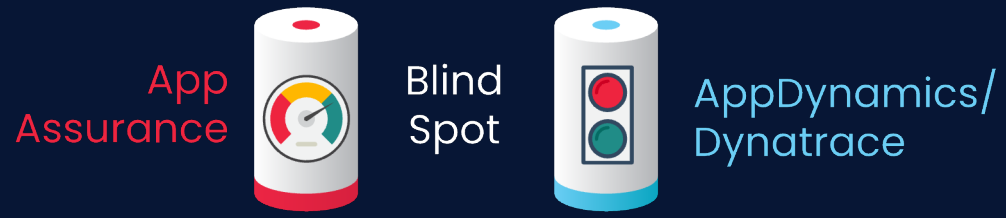
Even successful device-level changes using traditional approaches can result in unintended consequences. It's essential to safeguard your network design and configurations from human errors and configuration drift to ensure access to money.



Mitigate service outages and performance degradations

It's critical to deliver reliable financial services for customers, including transactions, to avoid poor service and negative impact to customers' businesses. Even in resilient and secured hybrid infrastructures, the reality is that services outages are increasing in frequency and severity.

Gain visibility across networks and clouds



There is a gap in visibility between your digital experience monitoring tool and your observability tool. It's critical to maintain complete visibility to the internal network. Without edge-to-cloud visibility, you don't know if an issue occurred or where it occurred meaning it takes longer to find and fix problems.

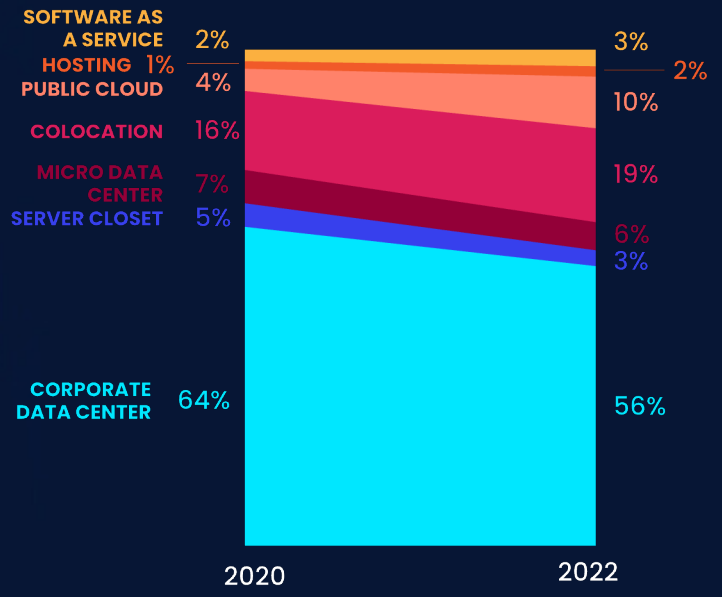


Since applications can be affected by poor network conditions including latency, jitter, and packet loss, it's important to maintain intended configurations and proactively check them against baselines to isolate problems quickly.

With financial services workloads in a distributed environment, a single source of truth across teams can accelerate network tasks and foster collaboration.

Digital Infrastructure Is Hybrid: Complex, Distributed, and Multi-party

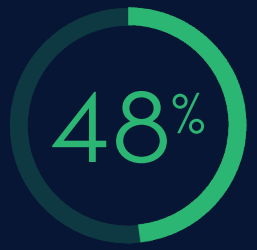
Financial Services workloads run in multiple locations



- Critical IT is now executed in multiple environments
- Migration of workloads out of enterprise sites is slow but steady
- Third parties:
  - Have limited legal responsibility for outages
  - May be difficult to audit, test, assess or otherwise make accountable

Without accurate data, operations teams won't be able to trust the data and the changes they make to the network.

EMA reports that nearly



of organizations are still relying at least partially on manual data gathering for their data center network automation tools.[9]

An NSoT based on partially accurate components will limit the ability to scale network automation initiatives beyond



of activities.[10]

Most enterprises don't have an accurate, robust "enterprise class" NSoT (we estimate it is lower than 25%). We recommend investing in a modern NSoT to scale network automation efforts.[11]

Why More Financial Services Organizations Choose NetBrain for Network Automation

NetBrain helps financial IT organizations be enablers of their businesses by reducing their risk posture and giving them the confidence to make accurate changes to the network. That's because NetBrain automates any hybrid-cloud, multi-vendor network without code to preserve the desired behaviors (intents) needed for every application to perform consistently.

NetBrain Next-Gen is a no-code network automation platform built on a set of patented core technologies for managing hybrid networks. The platform captures the entire design of the hybrid network as thousands of intents that describe the connectivity, performance characteristics, and security profiles needed by each service.



NetBrain then verifies the network's ability to deliver applications reliably, to prevent network outages, to allow for faster and safer network changes and to reduce remediation times when unforeseen network issues occur.

- An advanced no-code engine allows subject matter experts to capture their expertise so it can be shared and re-used by others across the organization. This reduces escalations and the delays associated with troubleshooting.
- A real-time digital twin connects to a no-code automation platform to capture the intent of the business applications and translate that to all the network components in the network.

NetBrain Prevents More Types of NetOps Problems for Financial Services

NetBrain Next-Gen helps financial services organizations get control of network operations – *today* - to help them give their businesses an edge.

1. Preventing Outages and Disruption – it's all about application performance
2. Protect Change Management from Configuration Drift and Human Error
3. Gain Confidence with Security and Compliance Enforcement
4. Contextualize Application Path Performance
5. Make Your Network a Single Source of Truth with Edge-to-Cloud Visibility
6. Proactively Troubleshoot Network Problems
7. Automate Intent-Based Network Assessments Continuously

NetBrain is the only no-code network automation and visibility platform more financial IT organizations choose to help them maneuver the network through future business uncertainty with confidence. Innovate faster and spend more time on important tasks allowing you to be more agile in the competitive financial services market.

[1] https://blogs.idc.com/2021/03/22/establishing-resiliency-through-a-modern-regulatory-change-management-strategy/

[2] The employment situation. Sep. 2022

[3] Center for Financial Professionals (CeFPro®), 2022 - https://d17802kg5dey7s.cloudfront.net/webapps/mapcrm/eventspeakers/3l3o81o2q9kn4qmnhsq63sm3qt/FINTECH-LEADERS-2022-FINAL.pdf

[4] Source: Industry AI Path-2021, JDC May 2021

[5] IDC eBook Creating the Future Infrastructure for the Banking Industry

[6] Source: Uptime Institute Global Survey of IT and Data Center Managers 2020 Financial Services Sector only (n=66)

[7] Source: Uptime Institute publicly reported outages database (n=74)

[8] IDC Modernizing Regulatory Change Management in Banking and Financial Services

[9] Enterprise Management Associates® EMA Research Report | The Future of Data Center Network Automation

[10] Graphics created by Netbrain based on Gartner research. Source: Gartner, Inc., Market Guide for Network Automation Tools, February 22, 2022.

[11] Gartner® Gartner, "Market Guide for Network Automation Tools", Andrew Lerner, Ted Corbett, 22 Feb 2022. GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.

About NetBrain Technologies

Founded in 2004, NetBrain is the market leader for NetOps automation, providing network operators and engineers with dynamic visibility across their hybrid networks and low-code/no-code automation for key tasks across IT workflows. Today, more than 2,500 of the world's largest enterprises and managed service providers use NetBrain to automate network problem diagnosis, generate real-time documentation, accelerate troubleshooting, and enforce enterprise architectural rules.



NetBrain

+1 (800) 605-7964 | info@netbraintech.com | www.netbraintech.com

Copyright © 2023 NetBrain Technologies, Inc. All trademarks referenced herein belong to NetBrain Technologies, Inc

NB-EB-FB-102323