FORWARD

CUSTOMER CASE STUDY

Forward Predict to Deliver $3M Return for Global Financial Institution by Proving Changes Before They Ship

By proving the impact of network changes before deployment, the institution will reduce risk, accelerate execution, and create measurable business value.

A Global Financial Institution Built on Scale and Trust

One of the largest and most trusted systemically important financial institutions in the world operates a global network underpinning its transactions. As an initial project, the institution focused on several of its data centers and their corresponding wide area network (WAN). This includes over 20,000 managed devices supported by a lean team of full-time network engineers who are responsible for ensuring the network performs without interruption in support of billions in annual revenue.

At that scale, every change carries weight. A misrouted prefix or a policy that drifts from baseline can disrupt trading and financial transactions at machine speed. That is what puts the network engineering team under constant strain: they are responsible for keeping the network secure, compliant, and available at all times, while adopting new technologies such as artificial intelligence (AI).

A Bottleneck Built Into Every Change Window

At this global financial institution, change is constant, time-consuming, and stressful. Before a single command reaches production, proposed changes go through weeks of design review, peer sign-off, and change advisory approval, with buffer time, extra review cycles, and late-night maintenance windows built in. Even so, the outcome of every change is uncertain and risky. This is not because of carelessness, but because until now, no one could validate a change's outcome until it was live. Even after every review cycle, the honest answer to "will this work" was still "we will find out when we run it."

Monitoring tools, peer reviews, and change advisory boards can only discern what has already happened on the network. None of them can define how a proposed change will behave in production, no matter how many people reviewed it or how long the review took.

That uncertainty has a cost. Based on downtime estimates and industry standards, the institution is expected to incur millions of dollars each year in preventable costs and risk. That includes unverified migration changes pushed into production with no way to deterministically test them first, change-related outages that pre-change verification could have caught, configuration drift from mandated baselines undetected between quarterly audits, and incident diagnosis that consumed hours of senior engineering time with no queryable record of actual network behavior. When the network could not be changed with confidence, business requests were delayed. The result: the infrastructure meant to accelerate the business had become the thing holding it back.

With Forward Predict, the institution is expected to recover more than $3 million in costs every year by evaluating the outcome of every change against a mathematically accurate model of the network before it reaches production.

Preventing Over $750,000 in Expenses by Modeling How a Migration Wave Will Land Before It's Live

The institution is in the midst of a multi-year core network modernization, migrating production traffic onto a new backbone in dozens of waves. Although changes were pretested in the lab, deterministically validating each wave used to mean testing directly in production maintenance windows. With Forward Predict, engineers model each wave against a mathematically accurate representation of the live network first, getting the same answer in about an hour that used to take a full day of production testing. This single use case is expected to save nearly $750,000 per year in avoided labor and reduced migration risk.

The director of network engineering shared that, prior to implementing Forward Predict, the only way to find out whether a migration wave had delivered the intended behavior was to implement it on the production network and wait to see. Forward Predict allows them to understand the full impact of a change before it is pushed live. This has drastically improved the efficiency and predictability of their change windows.

Preventing Outages and Saving Over $425,000

Every year, the institution pushes nearly 2,000 WAN changes through its network. Forward Predict will first verify each one against a mathematically accurate model of the production network, catching routing loops, reachability failures, and policy violations before they ship. This is expected to prevent most of the institution's change-related outages and save over $425,000 annually in avoided downtime and reconciliation labor.

Continuous Proof That Compliance Holds - A Nearly $400,000 Benefit

Rather than waiting for a quarterly audit to surface configuration drift from mandated baselines, the institution will be able to verify every device continuously against policy. Deviations that used to take weeks of manual sampling to find will now surface within the hour, with affected flows identified automatically. The shift can generate approximately $400,000 in benefits each year by reducing audit labor and avoiding drift-related incidents.

Cutting Root Cause Time From Hours to Minutes While Pocketing Over $500,000 Annually

When a financial transaction application or customer-facing service had a connectivity issue, engineers used to reconstruct the network's behavior live, device by device, a process that averaged close to ten hours per major incident. With Forward Enterprise, engineers query an up-to-date, mathematically accurate model of the network directly, asking what a flow's actual path looks like or what changed in the last several hours, and get an answer in minutes. The institution is projected to recover over $500,000 a year in engineering time alone. The team no longer needs to manually troubleshoot; according to the team; engineers can ask the network and get answers faster than it used to take them to log into the first device.

Time Reclaimed, Confidence Gained

The dollar figures tell part of the story. The rest is what the team does with the time it gets back. Engineering hours once spent on manual verification, audits, and live troubleshooting are now redirected to the architecture and modernization work the institution had struggled to prioritize. Changes still go through review, but with the assurance that a change will do exactly what it was designed to do, and nothing else. The network has stopped being the reason the business waits and started being a trusted enabler of the revenue it depends on. No longer spending its hours figuring out what a change will do, the team acts faster, and with certainty.

The Foundation for Trusted Autonomous Networks

For an organization managing tens of thousands of devices with a small engineering team, that speed and certainty are the foundation for what comes next. Every verified change, whether initiated by an engineer today or, eventually, by an autonomous agent, is proof that the intended outcome and the actual outcome are the same thing. That proof is what the institution is building on as it moves toward a future where more of its network runs with less direct human intervention and with full confidence in the results. Trusted autonomous networking at scale is not a separate initiative. It is what this foundation makes possible next.

Learn more about Forward Predict.