



Visa is Everywhere It Wants to be with NETSCOUT

OVERVIEW

Business Value

- Provides comprehensive service assurance for a worldwide digital business that uses innovative technologies including cloud, Unified Communications, cybersecurity and IoT
- Improves service performance 50-79 percent
- Reduces business risk 25-49 percent for large-scale digital initiatives
- Delivers investment payback in less than three months through operational efficiencies

Business Assurance

- Continuous monitoring and measuring of services performance and infrastructure
- Proactive identification of service-performance issues
- Situational awareness across IT departments through role-based access to service-centric dashboards
- Top-down contextual workflows support quick analysis of interdependencies and root-cause triage across applications, infrastructure and digital services

The NETSCOUT nGeniusONE Platform Assures Visa's Services with End-to-End Visibility

Customer Profile

Headquartered in Foster City, California, Visa International is one of the most well-known financial services companies in the world with business operations spanning the globe. The company offers branded credit and debit cards and payment processing services through the world's largest payment network that processes 112 billion transactions a year totaling \$7.4 trillion in goods and services. The company employs over 11,300 people and exceeds 13.5 billion dollars in revenue annually.

Visa's IT Challenges

Digital has always been in Visa's corporate DNA and now as the world's largest payment network, it is the cornerstone of its far-reaching business services. As part of Visa's declared mission to provide a secure and seamless payment experience, whether the purchaser is online or offline, the company has established strategic partnerships totaling 13,700 financial institutions in 200 countries with 40 million merchants around the globe. In order to fulfill such transactions, Visa has an expansive IT infrastructure capable of handling more than 65,000 transactions per second. If that weren't impressive enough, Visa CTO Matt Quinlan says the company can route any transaction through its networks around the world and back in just 1.4 seconds. Cybersecurity, too, is vital to Visa with every transaction monitored against 100 pre-established fraud-detection parameters – and all of it executed in real time.

One of the keys to Visa's impressive enterprise IT infrastructure is its capacity. Housed in a 140,000-square-foot facility on the east coast, Visa has two data centers that can operate interchangeably and are configured to process as many as 30,000 simultaneous transactions. The company's Operations Center East is comprised of seven independent physical pods that are linked by a corridor that is as long as three football fields. Two of the pods oversee the VisaNet payment-authorization system with three pods serving as backups. Inside the pods is where the digital magic happens with an expansive network including 376 servers, 277 switches, 85 routers and 42 firewalls.

This intricate IT infrastructure is what enables Visa to process transactions around the world and to keep its business running. Moreover, Visa's sprawling IT infrastructure embraces innovative technologies including Unified Communications (UC), IoT, cybersecurity and software-defined data centers.

Visa's service-delivery infrastructure spans from the backend servers to edge devices all over the world. Visa – and its customers – can't afford service performance blind spots. Lack of visibility into the root cause of service degradations can negatively impact millions of consumers and merchants. Visa is also a practitioner of Digital Transformation (DX) and faces a multitude of challenges that come with it including speed and scale from DevOps to the production IT environment. No company understands better than Visa how the new digital thread is unleashing a ceaseless and seamless flow of data across the corporate value chain. This digital shift is a tsunami that carries with it opportunities with smart adopters like Visa redefining customer experience, operational processes and business models. For example, Visa introduced a payment ring worn by athletes during the Rio Olympics to make purchases, essentially replacing a card. Data was securely exchanged during the transactions and the ring added convenience to the buying process. This kind of innovation is only as good as the service assurance that comes with it. And to make that happen requires unrestricted, comprehensive visibility of the entire service-delivery infrastructure and gaining unprecedented IP intelligence from smarter data and superior analytics.

Gain Deep Insights with NETSCOUT

NETSCOUT's vision is to give superior business insights by providing a world-class, real-time information platform that harnesses the full power of IP intelligence. Through the NETSCOUT nGeniusONE® Service Assurance platform, companies like Visa are able to better manage risk, drive improved service performance, ensure security and facilitate ongoing DX initiatives.

Managing a complex IT infrastructure environment, while simultaneously implementing future strategic digital initiatives such as Visa is striving to do, can be a Sisyphean task. The IT organization



is truly a partner in assuring the success of the digital business. IT professionals are tasked with delivering services such as Microsoft Office 365, Oracle, Citrix and a lot more. And they must assure these services across virtual, physical and hybrid service-delivery environments that include network, servers, service enablers (like DNS), n-tier applications, middleware, databases and QoS. To proactively prevent service degradations that can literally escalate into scores of hours and cost millions of dollars requires a unified approach to monitor and manage an enterprise's business-critical IT infrastructure. Furthermore, enterprises need a comprehensive understanding of their network, service and application tiers. In the Digital Age where information is the currency for optimal business results and strategic planning, gaining deep insights from traffic data, and complementary sources like NetFlow to deliver a flawless end-user experience and improve IT staff productivity, is a necessity not a luxury.

A top-down service assurance approach and end-to-end operational visibility enables enterprises to acquire critical insights into vital service performance data and metrics across the entire IT infrastructure. How so? Coupled with the InfiniStream® appliance for a complete and seamless view, and with NETSCOUT's patented Adaptive Service Intelligence™ (ASI) technology engine, the platform provides a cost-effective solution for monitoring data, gathering IP intelligence and delivering real-time and comprehensive service performance views. Essentially, the NETSCOUT nGeniusONE Service Assurance platform proffers an unequivocal understanding of the interrelationship

and dependencies of the service-delivery environment. In a digital world where IT complexity grows and there is no off, and with the increasing possibility of things breaking, organizations like Visa turn to NETSCOUT to keep customers happy using a service assurance solution that delivers insights at the speed of business.

Visa's Results Using NETSCOUT nGeniusONE

The results Visa has derived using the NETSCOUT nGeniusONE Service Assurance platform have been remarkable. As confirmed by an independent third-party TechValidate, the financial services giant has improved service performance by 50-79 percent and reduced business risk substantially as well. According to Robert Ferguson, an IT Director with Visa, they also achieved a fast payback period through increased operational efficiencies and leveraging a common situational awareness for better collaboration. Moreover, Ferguson says his IT engineers consider NETSCOUT nGeniusONE their "go-to tool of choice" for identifying and resolving troublesome IT infrastructure issues. Perhaps most tellingly, Ferguson affirmed, "Our TCO [total cost of ownership] has improved with the NETSCOUT nGeniusONE platform's current instrumentation. MTI [mean time to investigate] and MTTR [mean time to repair] reduced 20 percent over the year, and it continues to improve." A study by Forrester Consulting discovered that IT outages and degradations can cost a company millions of dollars a year. Thus, reducing mean time to knowledge (MTTK) – the most critical factor when it comes to MTTR – is financially significant.

Visa's results are not unique. A confirmed 99 percent of surveyed NETSCOUT customers say that the NETSCOUT nGeniusONE platform puts "the truth" into the hands of the IT organization with trusted service-centric dashboards. Moreover, 96 percent confirm that the nGeniusONE platform helps foster collaboration between the different IT teams and allows their organization to get ahead of IT issues before they become business problems by continuously monitoring and measuring infrastructure performance. And it also applies to the "continuous delivery" model where agile Development and IT operations can quickly respond to the needs of the business. Accordingly, Visa says the nGeniusONE platform with ASI technology is significantly better than alternative solutions for continuous application delivery and performance monitoring.

Summary

Digital Transformation requires a proactive re-imagining of a business' mission and purpose. Executing an all-encompassing digital strategy is not easy as it is fraught with harsh gravitational forces that seek to detract an organization from accomplishing its business objectives, but Visa has done so.

Visa continues to evolve and grow its business by mastering the digital within its own enterprise and by maximizing the visibility of digital data and services across its IT infrastructure with the NETSCOUT nGeniusONE Service Assurance platform. By doing so, Visa will continue to ensure a flawless user experience for its customers around the world.

Technology is at the heart of Visa's service offerings, and the company believes continuous digital innovation is a winning model for its long-term growth and viability. With NETSCOUT in their corner, Visa can innovate with confidence.

Are your employees, customers, and business partners truly enabled and empowered by Digital Transformation? Download the free research paper, [Insight into Everything: The Criticality of a Business Assurance Platform for Digital Transformation.](#)

For more information on how you can enhance your organization's service performance, please visit www.netscout.com or call +1-800-309-4804 today.



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