NETSCOUT

Assuring the Enterprise in the Digital Era – Financial Services

Digital transformation (DX) trends and new business models in the data-centric economy

Knowing what's happening on the network is important; knowing why it's happening is the new commercial imperative for the digital enterprise.

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Digital transformation is changing the game

The world of business is undergoing a seismic shift in business process and customer experience brought on by the rapid evolution of technology and connectivity. As the forces of change continue to accelerate and enterprise agility becomes more software-centric and unified, today's forward-thinking businesses need to recognize a simple, universal truth: digital transformation (DX) is leading the charge toward the future.

Based on this truth, NETSCOUT® sought to identify market insights on the business challenges involved in DX. Hence, in March 2017, NETSCOUT commissioned Vanson Bourne, an independent global research firm, to research DX readiness and its immediate impact on global businesses.

Vanson Bourne surveyed 400 IT and business decision makers in the U.S., UK, Germany, and France on the challenges they face, their preparedness, market position and what they hope to achieve. The survey looked at the attitudes held toward the pace of digital change across several key industries, including the financial services sector.

While 'going digital' is a major undertaking, assuring the delivery of business services that are always available and always working is what bonds the customer to the organization over time.

Faced with escalating levels of interconnectivity and service inter-dependencies that now exist, the priority for the digitally transforming financial services company is to leverage information in order to gain insight into service delivery, operations, and business performance. Clearly, organizations are aware of the need for DX. **Almost eight in ten (79%) survey respondents believe that DX is an urgent requirement for their organization.**

The majority of executives polled also stated that their organization measures ROI on technological/IT investments. More than half measured ROI by looking at operational efficiency, customer experience, security benefits, and financial returns. Eight in ten organizations that measure ROI on technological/IT investments such as mobility, artificial intelligence/robotics, and machine learning expect that cloud solutions and IT security would have a positive ROI.

Importance of continuous monitoring and real-time analysis

Often perceived as a conservative industry that's inherently risk-adverse, the financial services sector quickly embraced the digital landscape and continues to undergo dramatic change with its pervasive use of technologies. Unsurprisingly, many of the innovations in retail banking have been driven by the needs of the customer. The availability of sophisticated mobile applications, SMS alerts and real-time transactions all underline customer expectations for a seamless, secure, omni-channel experience. The pioneering work into near field communication (NFC) or digital wallets is another highly visible example of an industry keeping abreast of technological advancements for attracting and retaining its account holders.

For banks, brokerages, and other financial service businesses, the customer experience is strategically vital as evolving digital technologies push service delivery expectations skyhigh. Yet many financial service IT departments face an array of challenges in their effort to operate in the digital economy with outmoded infrastructures creating IT silos, service performance degradation, poor insights and inadequate visibility, while having to mitigate the almost daily cyber-threat.

While navigating the disruptive trends of collaborative ecosystems, cryptocurrencies and artificial intelligence machine learning, many financial services firms are turning to DX technologies to improve their customer intelligence, reduce risk, maintain regulatory compliance and identify fraud patterns and trading activity. As such, the benefit of DX can be seen to provide secure, business agility that will improve operational processes and enhance the customer experience, all while reducing costs within a tightly controlled framework.

Now more than ever, financial services companies need to rely upon IT for real-time, actionable insights into the connections between stakeholders, data, and processes. Our research revealed that the main **impacts of the increasing pace of change on the financial services industry are identified as competition, which is now global (54%), and new products that need to reach the market as fast as possible (54%).** New capabilities in this market, often driven by agile fintech companies, have engendered an expectation in the consumer's mind, especially among today's millennials. They all want services delivered quickly and flawlessly, every time. Financial services organizations that rely upon the immediacy of data in both customer and financial transactions must now integrate web, mobile, phone, and in-person services and innovate like never before or customers will be tempted to go elsewhere. For example, with credit card companies processing tens of thousands of transactions per second, the IT infrastructure needed to keep the businesses running is mission-critical; they simply can't afford service performance blind spots.

Beyond the many digital channels, new business models that reflect what the customer expects next is another challenge for financial services, where existing boundaries and barriers begin to blur. While maximizing revenue, cost control and mitigating risk remain key business drivers, so too is evolving all front-office functions to become integrated with the back-office. With so much focus on customer-centric innovation at the branch or online, it's important to ensure all information and cross-functional processes are fully connected and visible to enable next-generation service innovation, such as virtual tellers. These interactive teller machines are emerging as a new way for banks to cut onsite staff costs while providing personalized, financial transactions via video link with the bank from ATMs in remote or strategic locations.

Financial service organizations must therefore continue to innovate and integrate web, mobile, phone, and in-person services like never before, or customers will be tempted to go elsewhere.

Having a greater reliance on the digital infrastructure within a heavily regulated industry brings its own set of challenges. A reported estimate in **Forbes** stated that the typical finance IT organization will spend up to 30 percent of its budget on compliance disciplines, such as Governance, Compliance and Risk (GRC) and security, while allocating 10 percent of IT staff to these initiatives.[1]

Other issues facing the industry include advanced computing and analytics and the latest digital innovation, blockchain. Due to its promise of speeding up transactions and cutting costs, while simultaneously minimizing the constant risk of fraud, blockchaining is one noteworthy technology change that has emerged as a secure and transparent way to track financial assets. Designed to underpin digital currency transfers over cryptographically secure networks, the technology provides a digital ledger of transactions, agreements or contracts - anything that needs to be independently recorded and verified. One main difference to traditional accounting methods is that this ledger isn't stored in one place; it's distributed across several, hundreds or even thousands of computers around the world, so it's harder for hackers to attack it. At last count, 40 top financial companies[2] have already experimented with distributed ledger technology, and experts predict that as a game-changing technology, blockchain alone will cause a massive upheaval within the industry.

Overall, the industry's deep penetration and acceptance of web-based services and mobile devices continues to set expectations for rapid innovation in digital financial services offerings.

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[1] Forbes.com. 6 Predictions About The Future Of Digital Transformation. December 6, 2015

[2] Businessinsider.com. 40 top banks just did an experiment of 'unprecedented scale' with the technology behind bitcoin. March 3, 2016

Outages or service degradation simply can't happen and if they do, they must be addressed immediately. The need for service assurance, which is the ability to ensure the delivery of mission-critical business services across wired and wireless environments, has never been more vital with the main challenge to the industry being the huge demands placed upon the network infrastructure. With the aggregate costs of time spent in the war room, mean-time-to-knowledge (MTTK) and mean-time-to-repair (MTTR) all filtering down to diminished end-user experience, service performance and availability have become the most critical metrics to the financial services industry.

Equally, when every microsecond counts, service performance and transaction latency are critical factors in trading outcomes across capital markets. As financial companies invest in highly scalable, ultra-low latency data centers and infrastructure, IT organizations need real-time, actionable, intelligence in order to assure service availability and performance.

Assuring service delivery at any scale requires continuous monitoring and real-time analysis for rapidly detecting and diagnosing service delivery issues of any kind. To ensure this happens, data-driven, actionable intelligence and end-to-end operational visibility of the entire IT infrastructure is required. The financial enterprise needs to collect, organize, analyze and visualize all data critical for business assurance. With real-time insights, IT teams can optimize agility, assure service delivery, mitigate risk and provide a feedback loop to operations, development, and business functions.

While there are many forces influencing the industry, there's no question that the efficiency and effectiveness of service processes and the uninterrupted and secure flow of information remain essential. In our research, **almost two thirds (61%) of respondents from the financial services sector said that their industry is particularly susceptible to disruptive businesses, or may become so in the near future.** In facing its many practical issues and a digital culture that's profoundly influencing customer behavior and expectations, financial institutions continue to transform themselves to capitalize on opportunities within the modern, digital-centric economy.

A solution you can bank on: NETSCOUT's service assurance and security solution provides holistic visibility across the entire service delivery infrastructure from the wireless edge to the core to the data center and into the cloud. This is achieved by continuous end-to-end monitoring and analysis of the traffic and application data flowing over hybrid cloud environments. The analysis of the monitored data provides end-to-end service-level visibility in hybrid cloud environments that simplify the complexity, mitigate risks, accelerate business agility, and promote operational excellence.

The rapid pace of change

Although DX is a journey some organizations have already begun, many have yet to start. However, to be competitive and keep up with the connected world of digital business, financial services organizations should consider discarding the 'old' mindset in order to realize new digital approaches in customer engagement and business growth. Fueled by the exponential growth in mobile devices, high speed broadband, 4G and connected 'things,' our increasingly interconnected world is going to place ever larger demands on the data-driven business.

Harnessing intelligence from the data, or smart data, within this digital landscape is therefore paramount. It will enable the transformation needed for staying ahead of the unfolding trends and disruptions that many businesses face. Nearly six in ten (59%) research respondents agree that the pace of digital change is accelerating uncontrollably and as organizations strive to meet ever higher customer expectations and stave off competition, digital transformation strategies will help many define a new business future.

Turning data into actionable smart data: In order to support DX initiatives, IT organizations need business analytics powered by smart data that is well-structured, contextual, available in real time, and based on end-to-end pervasive visibility across the entire financial services organization. Since every action and transaction traverses the operation through traffic flows, a.k.a. wire-data, it is the best source of information to glean actionable insight from in today's connected world.

NETSCOUT's patented Adaptive Service Intelligence™ (ASI) technology generates smart data based on software-centric pervasive instrumentation of traffic-flows that are collected and processed at the source – from physical and virtual (SDN/NFV) infrastructure on-premises, software-defined data centers (SDDC) and hybrid cloud environments - to produce service contextual metadata in real time. This allows IT to gain critical insights into service delivery, business operations and other vital business performance indicators.

About NETSCOUT

Today's financial services organization is a rich and complex array of applications, services, software, and hardware. Your business and reputation rely on the "Always On" availability of these systems and services. At NETSCOUT, we are in the business of keeping all those discrete pieces running in harmony and without interruption.

As a leading technology provider, we are delivering next-generation business assurance solutions. We know traffic data is the singular source of truth when it comes to dealing with resource constraints, disparate tools, IT silos, outdated processes, network complexity, and exponential data growth. NETSCOUT's nGeniusONE® Service Assurance platform with Adaptive Service Intelligence (ASI) technology enables top-down service management and traffic-based intelligence across complex, converged IT environments. With our platform, you gain essential visibility into the relationships and interrelated nature of the entire IT environment to effectively triage service issues.

ASI technology continuously monitors the service delivery environment to identify performance issues and provides insight into network-based security threats, helping teams to quickly resolve issues that can cause business disruptions or impact user experience. ASI is at the core of everything we do, from the nGeniusONE Service Assurance platform to our security assurance solutions; Arbor Advanced DDoS and Advanced Threat solutions. Application assurance is key to transforming the data center, and with the introduction of software appliances, ASI technology allows deeper visibility into the interactions of the different components of modern applications. This is the case whether they run in the data center or in multi-cloud environments, and this service intelligence is also the basis for building and discovering new insights into operations, including security and system planning.

In an increasingly complex, vulnerable and connected world, our service assurance and security assurance solutions, with smart data technology, enables top-down service management and traffic-based intelligence across complex, converged IT environments, providing extraordinary performance, service quality and operational excellence. With NETSCOUT, you gain the confidence to operate, innovate and compete at the highest level.

Contact us to learn more: https://www.netscout.com/company/contact-us

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Corporate Headquarters	**Sales Information**	**Product Support**
NETSCOUT Systems, Inc.	Toll Free US: 800-309-4804	Toll Free US: 888-357-7667
Westford, MA 01886-4105	(International numbers below)	(International numbers below)
Phone: +1 978-614-4000		
www.netscout.com		

NETSCOUT offers sales, support, and services in over 32 countries. Global addresses, and international numbers are listed on the NETSCOUT website at: www.netscout.com/company/contact-us