

Assuring the Enterprise in the Digital Era – Public Sector

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 and public sector 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 organizations.

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 towards the pace of digital change across several key sectors, including the public 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 public sector agency 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.

Optimizing infrastructure assets

When serving the public, it's especially important to maintain service availability. Against a backdrop of budget constraints and cutbacks, IT organizations across most government agencies are constantly under pressure to provide the highest level of network and application availability to their employees, contractors, citizens, and residents – and all at the lowest possible cost.

Although the public sector, like any organization, is concerned with cost-efficiencies, providing a consistently reliable quality of service is an equally high priority such as in delivering emergency services. Where every second counts, contact centers are the frontline for dealing with incidents and emergencies. Providing a lifeline for people who urgently need help or assistance, the contact center is a complex communications hub coordinating emergency communications between all agency services. Operating under challenging conditions, first responders and public safety officials need to be rapidly dispatched and fully supported in the field with the requisite level of situational awareness.

When dealing with life or death situations, network and communications availability is critical. Voice and data systems can't go down or degrade, and call center staff must be capable of routing time-sensitive information to first responders. During national emergencies, network traffic can quickly stretch IT capacity with potential disruptions across the infrastructure. With contact center operations deploying increasingly sophisticated UC tools based on a single IP network, managing the quality and performance of every communication matters. The converged, multi-channel IT infrastructure that can integrate voice over IP (VoIP), chat, data video and web capabilities has to maintain a near-perfect level of service delivery for agency staff.

Removing service performance blind spots in complex IT infrastructures with interconnected components in a multi-tier, multi-domain environment is essential for controlling outcomes.

This complexity and the number of interconnected components in multi-tier, multi-domain environments means it is essential to maintain complete visibility of all traffic flows over the IT infrastructure to control outcomes. Dropped calls, long call times, long wait times or disrupted collaboration sessions must be avoided at all costs.

IT must rely on having an accurate view of the user experience and a system-wide view of all dependencies that could affect any of the unified technologies and capabilities. Only by having end-to-end service assurance that spans the entire network, across all platforms and environments, can they rapidly triage and resolve issues to ensure call center agent communications aren't hampered by poor call quality, ensuring every engagement has a positive outcome. However, perhaps unsurprisingly, our research showed that the **public sector feels safest of all from the threats of disruptive entrants, with 30% saying that their industry is not susceptible** and they do not worry about it.

Despite this, DX initiatives are being adopted by many public sector organizations across the globe. The U.S. is transforming the way the federal government deals with its citizens. Similarly, the UK has a program to introduce various digital services which focuses on easier access to citizen-facing services and information. The inter-relation and inter-dependence of different government bodies - either at local, regional/state and national level - however is a constant challenge, as are the perceived risks of security vulnerabilities throughout public-facing, online systems and processes where privacy and trust are critical. The same situation has a broadly international dimension with many countries looking at DX to bring its government closer to its people. The breadth of such transformation can cover many government agency initiatives and applications, such as:

- Registries for criminal investigative services networked across city, county, state, and federal agencies
- · Criminal justice network (CJX) and GCSX secure WAN
- Police and prosecutors' offices
- Social services providing electronic food stamps
- Treasury departments with electronic tax returns
- · Online renewal of car license registrations with registry of motor vehicles

Improving access to information, engaging more closely with citizens, and driving new valuegenerating service models isn't limited to government systems and public authorities, but in an area serving the public, it's especially important to maintain service availability.

The IT organization is expected to deliver maximum benefit with minimal risk by proactively monitoring and analyzing the inherently complex services in a cost-effective manner. The goal is to optimize infrastructure assets to drastically reduce CapEx and OpEx spending, but without compromising the end-user experience of citizens, employees, and contractors of government agencies.

Assuring UC deployment success: NETSCOUT solutions support new service rollout and ongoing UC service management for public sector communication and call center environments. NETSCOUT's vendor-independent solutions operate with a broad complement of vendors, helping to consolidate UC service management for highly complex, multi-location, multi-vendor environments. Improving access to information, engaging more closely with citizens and driving new valuegenerating service models isn't limited to government systems and public authorities, but in an area serving the public, it's especially important to maintain service availability.

The rapid pace of change

Although DX is a journey some organizations have already begun, many have yet to start. However, to keep up with the demands of the connected world of digital business, agencies have to discard the 'old' mindset in order to realize new digital approaches in customer engagement and process efficiency. 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 organization.

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 face many organizations. **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, digital transformation strategies will help many define a new, more responsive future.

Turning data into actionable smart data: In order to support DX initiatives, IT needs business analytics powered by smart data that is well-structured, contextual, available in real time, and based on end-to-end pervasive visibility across government agencies. 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 today's digital 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, operations and other vital performance indicators.

About NETSCOUT

Today's public sector agency is a rich and complex array of applications, services, software, and hardware. Your operations 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 <u>nGeniusONE®</u>_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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