



THE STATE OF IT TRANSFORMATION FOR THE PUBLIC SECTOR

An Analysis by Dell EMC and
VMware

Dell EMC® and VMware® are helping IT groups at government and public sector organizations transform to business-focused service providers. The State of IT Transformation for the public sector is an analysis of customer data provided by public organizations at the federal, state and local level throughout the globe who have assessed their current state and identified their biggest gaps. This report identifies only a handful of key drivers that we feel will help propel IT transformation within the public sector industry over the next few years.

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Executive Summary

Information Technology for the public sector and government agencies is constantly being redefined. The public that is being served is demanding more and more “consumer-like” services, and in turn your IT departments need to adapt and grow to offer IT-as-a-Service for the various departments it supports. As older services are utilized less, new services need to be deployed. IT professionals within the public sector may be strapped for resources, some forced to work with legacy systems that make it difficult to offer the type of strategic services that private companies can provide. In order to satisfy demand, protect public information, and eliminate waste and cost overages, IT professionals need to deliver reliable services while driving the IT transformation needed for greater flexibility, agility and scale.

Have you ever wondered how your plans for transforming your IT organization stack up against those from your public sector industry peers? It is a natural part of the planning process for IT professionals and business unit leaders to seek best practices from similar companies. Understanding the IT transformation process, Dell EMC and VMware have compiled information from government and public sector organizations to help provide a new view on where they are currently and, more importantly, where they want to be in the near future.

The State of IT Transformation in The Public Sector is a companion report of a larger analysis conducted by Dell EMC and VMware. Data was collected from a variety of companies, including federal and state governments and agencies, education and other public entities that participated in an IT Transformation Workshop -- which is specifically designed to help companies assess the gaps in their IT transformation, benchmark their current state against their peers, gain consensus among executives on prioritizing their goals and determine the immediate next steps in achieving those goals.

This report focuses only on the responses from the public sector industry and provides key highlights and insights on trends that impact IT transformation for government and other public sector companies. It will expand on the overall report by providing our view on 3 major drivers (applications, operating model, and infrastructure) for these organizations looking to achieve IT transformation. The entire State of IT Transformation report, along with additional industry companion reports, is available on the [Dell EMC website](#).

Driver 1: Operating Model & Service Strategy

Government agencies and the public sector will continue to push into the cloud, looking for ways to reduce cost and increase agility. However, with new technologies comes a need for added IT training and skills. A major driver for the public sector will close the talent gap that currently exists.



Only **nine percent** of respondents from the public sector reported that they have developed new IT skills and roles required for cloud optimized service management. Having skills in cloud technology, business-facing service definition, packaging and lifecycle management are critical to establishing services aligned to business needs and assuring their agile IT implementation

The public sector was in line with the overall average when it came to the lack of having the roles and training to support a fully optimized hybrid cloud environment. Nearly half of the public sector respondents, **forty-eight percent**, indicate that **no change in skills or training has been undertaken**.

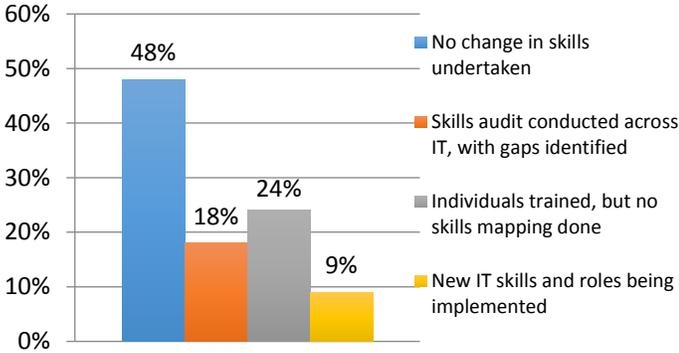
The gap between where the public sector is today and where they project to be within the next two years is telling, with **seventy-nine percent** of respondents revealing that they will not only have **added cloud requirements to training as well as skill requirements for new hires**, but will have integrated the **new skills into a IT transformation program**.

The need for a knowledgeable IT workforce, whether it be through talent development or hiring practices, is compounded by the fact that the public sector is driving to put more applications on to an efficient cloud delivery model. While **seventy percent** of those surveyed indicated that they currently have **no organized plan for evaluating workloads for potential hybrid cloud placement**, more than half (**fifty-two percent**) projected to have evaluated their application portfolio within the next two years, with **twenty-six percent expecting to have a recommendation for workload placement**.

In order to streamline shared services, the public sector worldwide will need to leverage highly customized cloud solution. IDC recently reported that by the end of 2016, thirty percent of government shared services will have started to transform into industry clouds¹.

¹ IDC FutureScape: Worldwide Government 2016 Predictions

IT Skills



Other Drivers: Service Predictability

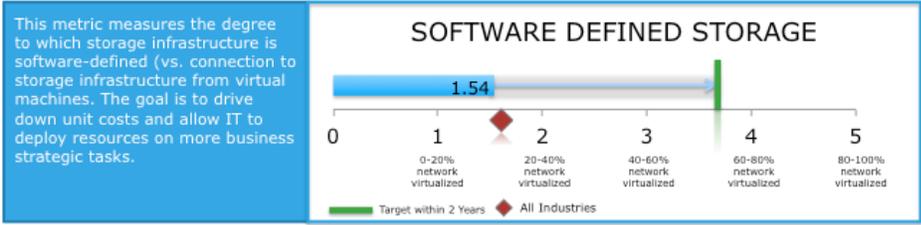
More than two thirds of respondents from the public sector indicated that they currently have either no proactive monitoring process in place or a manual process where an audit can be conducted to predict performance and capacity management. However, the participants looking for IT Transformation targeted service predictability as a priority target with **seventy-two percent of respondents looking to have automated predictability**, working their way to predictive capabilities with alerting and reporting in order to prepare for scenarios based on usage trending within the next two years.

Driver 2: Infrastructure

The public sector (like other private companies) faces many infrastructure challenges as they balance the need to upgrade an aging infrastructure with containing costs -- all while providing a stable and agile environment. Having multiple cloud options can make the difference in meeting this need, but business continuity and recovery concerns remain a top priority.



Ninety-four percent of respondents indicated that less than **forty percent** of their network has been virtualized and therefore software defined. **Seventy-nine percent** have virtualized less than **twenty percent** of their network. Software defined networking will help reduce the day-to-day operational tasks, and speed the delivery of services.



While on average the public sector participants in the survey ranked their software defined storage infrastructure in line with all industries, the aspirational target score for the public sector indicated that a significant amount of focus will be placed on the continued transformation of their storage infrastructure. While cost control is always a motivational driver, we see the move towards software defined as being more strategic and in line with the need to analyze more data, build better clouds, and deliver modern applications.

Faced with an aging infrastructure, the public sector will need to start upgrading. Modernizing legacy systems is the first step to achieving other strategic goals. New technologies cannot rest on the foundation of older infrastructure. Software Defined Networks and Software Defined Storage will be a focus for the public sector in the next two years. Sixty-three percent of respondents expect to have at least sixty percent storage infrastructure software-defined by then.

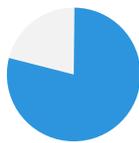
Business Continuity for Hybrid Cloud

In order to support the availability requirements of critical applications, IT in the public sector needs to put a process in place to seamlessly recover virtual machines from major service disruptions. **Eighty-two percent** of the survey respondents reported that less than fifty percent of their virtual machines have protection for hybrid cloud architectures via a modern, automated recovery strategy.

The cloud, whether private, public, or hybrid, requires a recovery plan. Over the next two years as more public sector organizations rely on the cloud, the need for reliable recovery strategies will increase.

Driver 3: Applications

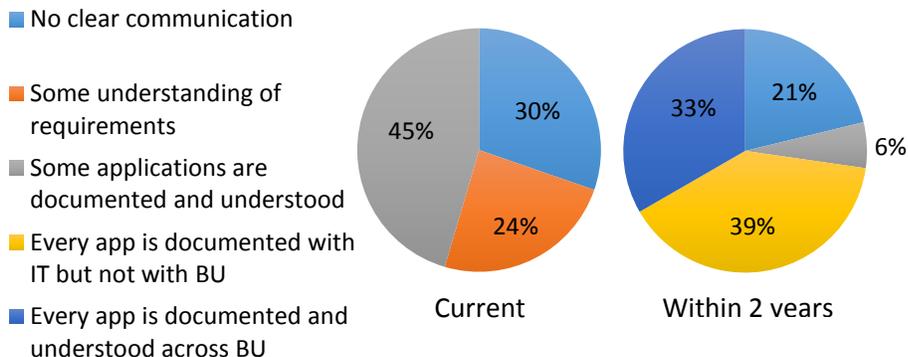
When it comes to the application portion of IT Transformation, the public sector participants lagged behind other industries, particularly in areas of application availability and the scalability of application platform. While many public sector organizations see the need to focus on application transformation, more emphasis will be needed to bring the public sector on par with other industries.



Seventy-nine percent of the public sector respondents would like to institute a Bring Your Own PC policy with a locked-down corporate image with secure access to corporate resources, working towards offering ubiquitous access from any device through a centralized self-service authentication portal to corporate IT services.

In a perfect environment tier 1 applications would be nimble and cloud-ready. However, **eighty-two percent** of those surveyed responded that **less than twenty-five percent** of the **tier 1 applications are modernized and or cloud-ready**. In fact, nearly all of the telecommunications participants in the survey indicated that less than **fifty percent** their current applications are not modernized.

APPLICATION AVAILABILITY REQUIREMENTS

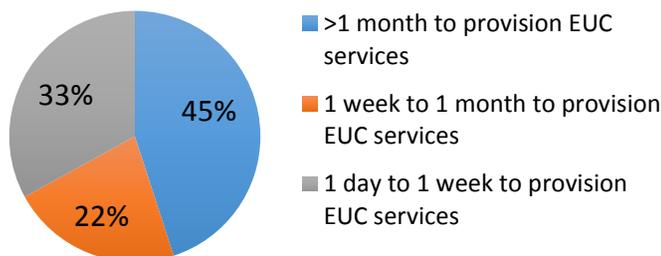


The public sector participant scored their industry well below the total average when it came to documenting and communicating the requirements for application availability. None of the respondents ranked above a three, with the majority indicating that they only have rudimentary documentation of select application. However, where they project themselves being in two years indicates a significant push for application requirements.

As IT teams in the public sector look to deliver more consumer-like services, communications between IT and business owners for things like application availability requirements will increasingly become a focal point. Application transformation in the public sector will require greater alignment between departments to ensure that IT is providing the types of services needed.

The majority of public sector respondents indicated that their organization still had ways to go in the areas of provisioning end user compute services, as well as other “user-friendly” categories like access anywhere. As the chart to the right demonstrates, sixty-seven percent of the respondents take more than one week to provision end user compute services.

END USER COMPUTE



Conclusion

When it comes to IT Transformation, the public sector is on pace with other industries in some areas, but lagging behind in others. The rationale for this can be found by examining the nature of the industry and some of the trends over the past five years. IT for the public sector will, and should be, uncompromisingly focused on evolving their business model to focus on providing more services to the public, not simply providing information. The ability to offer consumer-like services helps keep the public informed, provides more efficient services and ultimately may reduce operating costs by transitioning from the legacy infrastructure to more virtualized ones.

The public sector organizations that are striving for transformation are developing innovative solutions on par with those of private companies. Their organizations' infrastructure, operating models or IT service strategies are driving change that will enable the public sector to be more efficient, reducing time spent managing issues and allowing for more time meeting the needs of the public they serve.

About the IT Transformation Workshop

The [IT Transformation Workshop](#) can help IT organizations identify key transformational initiatives by measuring the readiness of their current environment. Organizations receive benchmarking data that shows where peers in their industry are in each area of transformation, and an analysis of the key gaps in their environment. At the end of the workshop, participants have a prioritized list of next steps to take, along with the estimated return on investment (ROI) that would be seen by closing the gaps in IT transformation that were identified in the workshop.

Appendix—Methodology

The organizations analyzed in this report began their transformation with an IT Transformation Workshop, which was specifically designed to help them assess the gaps in their IT transformation, benchmark their current state against their industry peers, determine their goals, and gain consensus among their executives on prioritizing the immediate next steps to take to achieve those goals. The CIO and his/her direct reports are the participants at these workshops.

This report is an analysis of the data collected during these workshops and is a barometer of where companies are in their IT transformation. Therefore, this analysis is not a random sample of research subjects, but an analysis of companies who are actually in the midst of an IT transformation.²

Prior to an IT Transformation Workshop, the participating public sector organization completes a questionnaire that is used to assess the company's current and desired state of transformation. There are 29 questions that cover various areas:

Operating Model and Service Strategy

- Organization and skills
- Packaging IT services—self-service enablement, financial transparency
- IT service automation—provisioning, metering, monitoring, reporting, and predictability

Applications

- Application modernization, development, and platforms
- End-user computing

Infrastructure

- Hybrid cloud—workloads and architecture
- Virtualization—compute, storage, app, network, and desktop
- Business continuity and availability

Workshop participants answer each question in two ways – where they are today (their current state) and where they want to be within the next two years (their desired state). A gap analysis is performed and recommendations for closing those gaps are presented to the CIO and team. The company also receives a benchmark analysis that compares their progress in IT transformation against industry and competitive peers.

² This report covers the 33 public sector or government agencies who participated in workshops between 2014 through mid-2015

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