Digital Transformation in Public Sector

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Worldwide Public Sector
Microsoft Corporation
Cloud is becoming integral to digital transformation

- Leverage economies of scale and expertise
- Reshape how governments engage with citizens
- Drive new and more rapid sources of innovation

"71% of strategic buyers cite scalability, cost and business agility as the most important drivers for using cloud services."

– Gigaom Research
Leading Humanitarian Organization Speeds Response Time by Moving to the Cloud

“When it comes to disaster response, being able to communicate and share information 24/7 is critical. The flexibility of Office 365, plus the 99.9% uptime guarantee from Microsoft, helps us do that with ease.”

– Claus Olsen, CIO, Danish Red Cross
The Red Cross Luxembourg had an aging, costly on premise email platform that had reached its limits but by moving to Exchange Online it gained lower costs and higher capacity.

"Office 365 works on any device. Anyone who wants to can now use their favourite smartphone. If a problem occurs or when an employee leaves us, we can block access from a central point."

— Martial Arnold, IT Director, Luxembourg Red Cross

As a result of using a hosted private cloud from Web4U that utilizes Windows Server 2008 R2, Hyper-V technology, System Center Virtual Machine Manager 2008 R2, and Self-Service Portal 2.0, Czech Red Cross has achieved the critical levels of scalability that it needs to support a reliable communication platform during times of crisis and to provide timely humanitarian aid.

Elasticity and scalability of ICT systems

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"The demands we place on servers during emergencies can increase by several orders of magnitude. With a private cloud built on Microsoft technologies, however, we can easily accommodate those levels."

— Marek Jílk, President, Czech Red Cross
Francis Maude approves ‘cloud first’ policy

Purchases through the cloud should be the first option considered by public sector buyers of IT products and services, the government has confirmed.

Francis Maude, Minister for the Cabinet Office has said that the formal introduction of a ‘Cloud first’ policy will drive wider adoption of cloud computing in the public sector; boosting flexibility – and furthering savings and efficiencies – through the government Digital Marketplace, which is a quicker, cheaper and more competitive way for the public sector to buy IT.

In future, when procuring new or existing services, public sector organisations should consider and fully evaluate potential cloud solutions first – before they consider any other option. This approach is mandated to central government and strongly recommended to the wider public sector. Departments will remain free to choose an alternative to the cloud if they can demonstrate that it offers better value for money.

*By creating a competitive marketplace, the G-Cloud Framework will constantly encourage service providers to improve the quality and value of the solutions they offer, reducing the cost to taxpayers and suppliers. And it gives SME suppliers of niche products the same opportunities as bigger organisations supplying services*.

Francis Maude, Minister for the Cabinet Office
How do customers buy on G-Cloud

https://www.digitalmarketplace.service.gov.uk/

https://www.digitalmarketplace.service.gov.uk/buyers-guide

What accreditations does Microsoft have under G-Cloud?

• Microsoft complies with the UK Government’s Cloud Security Principles (CSP) – This is a self certification scheme. See https://www.gov.uk/government/publications/cloud-service-security-principles/cloud-service-security-principles

• The accreditations for our public cloud services are suitable for data marked in UK Government as OFFICIAL – which broadly covers most government data excluding SECRET and TOP SECRET.

• Microsoft has a number of applicable international accreditations which are an important element of the Cloud Security Principles including ISO27001 and ISO27018.

• Before the CSP regime, Microsoft had previously complied with the CESG Pan Government IL2 and OFFICIAL accreditation schemes.
Microsoft Partners on G-Cloud

- There are over 450 Microsoft Partners on G-Cloud Framework (v6). Most of these are SMEs.
- These Partners offer:
  - LSP services. They provide VL/EA transaction support for our indirect business. These include: Bytes, Civica, Computacenter, Insight, Kelway, Phoenix, SHI, Software Box, SoftwareONE, SGG, and Trustmarque.
  - Migration/deployment services for O365, CRM, Azure and Intune.
  - App dev and finished Apps that leverage Microsoft’s cloud platforms, such as specialist SharePoint or Dynamics apps, or solutions that use Azure compute services.
  - Service providers offering hosted services including the COSN Partners.
  - Other specialist cloud consultancy services.

N.B. Customers can buy our public cloud services direct from Microsoft or via the LSP and also buy a Partner’s additional service capability separately, as two distinct G-Cloud orders. In some cases – such as with Azure ISV partners – the Microsoft cloud services and associated costs are part of the partner solution. In this case we are essentially acting as a sub-contractor and the customer does not have to contract with Microsoft or the LSP. However the partner can still take advantage of any applicable accreditations we have in our service, but must accredit the overall solution from a partner perspective.
eJudiciary – Inspirations from the UK

Transforming the UK Judiciary using Office 365

• The eJudiciary will move all of the UK Judiciary onto a modern Office365 platform

• The judiciary is made up of
  • 3,000 full-time judges
  • 8,000 part-time judges

• The savings offered by moving to the cloud will allow MoJ to extend eJudiciary out to:
  • 24,000 magistrates

• Bring Your Own Device (BYOD)
  • Magistrates are currently not provided with any IT from the MoJ
  • eJudiciary will deploy EMS to secure the judiciary’s personal devices

“The biggest change for the Judiciary for 100yrs”

Lord Thomas - Lord Chief Justice

5 November 2013 at 12:39pm

Lord Chief Justice: Skype could be used in court

Speaking at his first press conference since his appointment, Lord Thomas said using “innovative” applications such as Skype would be an effective method for reducing the cost of “expensive” administrative hearings held in the run up to a trial.
eJudiciary - Worldwide Virtual eTrial

- A worldwide first in conducting an international Virtual eTrial.
- The mock eTrial was delivered by 5 eminent judges across 3 continents using:
  - Office 365
  - Lync
  - CaseLines – Azure based electronic case file
- The trial was a huge success with well documented evidence in both the press articles and our video case study:

**THE INDEPENDENT**
The e-trials of the future: Judges take part in pilot that could revolutionise court system

**Gazette**
E-trial judges hail digital court future

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Estonia Virtual Data Embassy Research Project
Research Project Definitions
Making sure we are all on the same page

Key Services
Services that must be operationally available and backed up, including the Population Register and Identity Documents Register, Commercial Register, E-Land Register, Riigi Teataja and E-File.

Data Embassy
a physical or virtual data center in a “friendly” foreign country that stores data of critical government information systems and mirrors critical service applications.

Technical Research
time-limited trial to demonstrate the feasibility of migrating the selected key services to Microsoft’s Azure platform.

Control Modes
Full Control, Fragile Control, No Control

ESTONIAN DATA EMBASSIES

- E-VOTING
- NATIONAL CITIZENS REGISTRY
- E-TAXES
- ID-CARD, MOBILE-ID & E-SIGNATURE
- E-GOVERNMENT & EESTI.EE PORTAL
- BUSINESS REGISTRY
- SOCIAL SECURITY AND PENSION REGISTRIES

and many other systems that are important for the Republic of Estonia
Technical Approach to the Research Project

Two workstreams at heart of the research project: President website & Riigi Teataja

- Agreed upon Risk Mitigation Plan
- Demonstration of capacity auto-scaling up under load
- Demonstration of seamless failover between datacenters
- Demonstration of secure updates to web content
- Failover and Failback scenario
- Validation of the 3 tier government model in the cloud
- Demonstration of seamless failover between datacenters
- Demonstration of capacity auto-scaling up under load
- Demonstration of continued availability under stress testing
- Demonstration of secure updates of database content
- Failover and Failback scenario

All cloud services accessed by smart card
Keep government up regardless of weather...

- Change the economic model and continuously drive cost down
- Transform how governments engage with citizens
- Reduce time to market for innovation
- Improve government resilience and cyber security

Thank you!