
Modernizing the public sector through the cloud

Progress Update on South Africa

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Background and Introduction

Modernising the Public Sector through the Cloud

A report commissioned by the Microsoft Foundation



- A report was commissioned by the **Microsoft Foundation and the South African Microsoft Office** in 2016
- The report is specifically designed to **support development of a cloud policy, strategy and implementation in South Africa**
- Interviews were conducted with **Chief Information Officers (CIOs)** at national and provincial level and members of the **Government Information Technology Council (GITOC)**
- Based on these and other insights
 - The “Why” for cloud computing in the public sector was revealed
 - Global best practices on use and implementation of cloud in the public sector were identified
 - The current status and ‘implementation and policy gaps’ were identified
 - 7 recommendations, pertaining to South Africa’s public sector were therefore developed
- **Today, we follow the progress and state of affairs in South Africa around these recommendations**

The 7 recommendations



Establish a dedicated Cloud Champion



Implement and enforce open and interoperable standards to government sector procurement



Improve the Availability and Quality of Broadband Infrastructure



Develop and implement a cloud computing policy framework for the SA public sector



Adopt best practices to develop security framework for cloud computing services



Expand data classification guidelines to include cloud computing



Position cloud as a solution to skills shortages

Why

- ❖ **Global Best Practice:** A designated entity that spearheads all cloud related policy developments
- ❖ Centralised procurement:
 - Provides **economies of scale**
 - Can be a **viable tool to rationalise ICT spend** in the public sector as per Treasury's objective
 - Potentially **avoid vendor lock-in and non-interoperable solutions**
- ❖ Broadband:
 - **Promotes widespread adoption** of cloud computing in government
 - Enables **E-government**
 - **Improves public service delivery**
- ❖ Ensures **even/consistent adoption** of cloud in South Africa
- ❖ A central security framework that is applied across all departments **ensures consistency of approach to cloud and avoids fragmentation** caused by custom requirements and implementation
- ❖ **Improves stakeholder confidence** in cloud computing
- ❖ Cloud services have the **potential to bridge some of the skills shortages** by providing user-friendly, cost-effective solutions to the current skills deficit. **researchICTafrica.net**



Progress Review for South Africa (1/7)

Recommendation



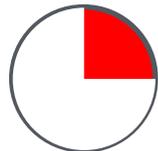
Establish a dedicated Cloud Champion

Proposed Actions

- ❖ SITA will need to
 - **Promote** government wide adoption of cloud computing
 - **Develop, oversee and enforce** standards and vendor certifications
 - **Provide support and resolve** any cross-organizational issues re: cloud
- ❖ And in line with this...
 - The champion could be a **special entity** like the G-cloud in the UK
 - SITA **collaborates** with relevant entities such as the DPSA, DTPS, State Security and SITA
 - Adopt and communicate an **official position on cloud computing** in the public sector
 - Government **acts as an anchor tenant** for the public sector

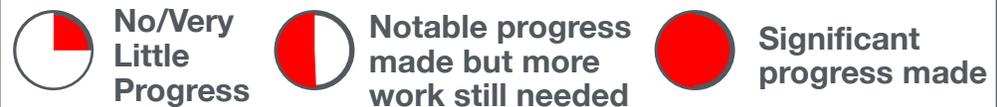
Current Status and Progress in South Africa

Overall Status



Overview/Justification

- SITA **is still defining its role and position** on cloud adoption in the public sector
- **Envisaged role** is for SITA to move from playing in the transactions role to “value add” role
- Has however, **communicated** that SA government will adopt cloud in the public sector the extent to which is not yet clear



Progress Review for South Africa (2/7)

Recommendation



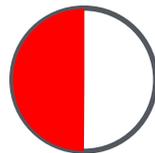
Implement and enforce open and interoperable standards to government sector procurement

Proposed Actions

- ❖ **Centralize** cloud procurement, define compliance parameters and procedures
- ❖ **Expand the current MIOS interoperability framework** to cover cloud
Implement and enforce interoperability among government departments
- ❖ **Propagate open standards** for procurement
- ❖ **Appoint dedicated compliance overseer** for procurement including CC
- ❖ **Develop uniform and transparent guidelines** for vendor certification and compliance
- ❖ Understanding that there is large sunk cost that has been made in existing systems and that the process is **gradual starting with integrating non-critical process, as it works towards a hybrid model**

Current Status and Progress in South Africa

Overall Status



Overview/Justification

- **No progress** in expanding existing standards (MIOS)
- **No new standards** have been defined or implemented for cloud procurement
- However, **has entered into partnership with Microsoft** to standardize Office 365 across all government departments
- **Developing a blue print** to govern the deployment and management of cloud applications



No/Very Little Progress



Notable progress made but more work still needed



Significant progress made

Progress Review for South Africa (3/7)

Recommendation



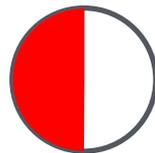
Improve the Availability and Quality of Broadband Infrastructure

Proposed Actions

- ❖ **Finalize** the implementation of SA Connect Policy in order to drive the successful adoption of cloud computing services within the public sector
- ❖ **Rationalize** state resources to avoid duplication
- ❖ **Cooperate** with the private sector and leveraging existing infrastructure to expand BB access
- ❖ **Finalise** the allocation of spectrum for the digital dividend in order to facilitate the expansion of LTE mobile broadband services

Current Status and Progress in South Africa

Overall Status



Overview/Justification

- Implementation of SA Broadband Policy implementation is **in progress**
- The proposed deployment of a wireless open access network (WOAN), which it says will be "a public-private sector-owned and -managed consortium" **remains contentious**
- **Allocation of spectrum** for the digital dividend which is critical for the deployment of LTE mobile services **remains in a state of limbo**
- **Sporadic** deployment of cloud enabled e-services being rolled in major cities that already enjoy widespread connectivity



No/Very Little Progress



Notable progress made but more work still needed



Significant progress made

Progress Review for South Africa (4/7)

Recommendation

Proposed Actions

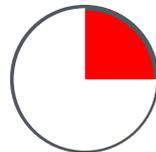


Develop and implement a cloud computing policy framework for the SA public sector

- ❖ **Develop** a dedicated **cloud computing policy** for the public sector
 - Should **include: public information classification** for cloud, **security standards** for provisioning cloud, **vendor compliance requirements, prioritising cloud** in the national ICT agenda and recognising **cloud as the preferred hosting platform**
- ❖ **Adapt the norms and standards framework** to include cloud services as a standard
- ❖ **Finalise the National ICT Policy framework** and provide future roadmap and include cloud computing

Current Status and Progress in South Africa

Overall Status



Overview/Justification

- Development of the cloud policy for government is in progress



Progress Review for South Africa (5/7)

Recommendation



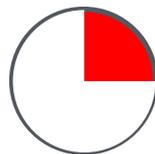
Adopt best practices to develop security framework for cloud computing services

Proposed Actions

- ❖ Security of government data is a key strategic focus for SITA - **Update MISS policy** to include cloud computing
- ❖ **Map data security requirements** to the published data classification for cloud to ensure adequate protective measures are in for each category of data in the cloud

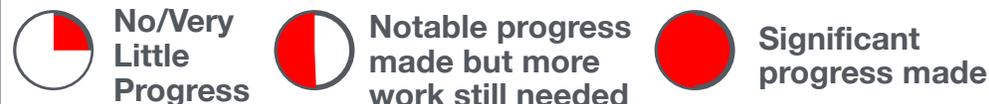
Current Status and Progress in South Africa

Overall Status



Overview/Justification

- Existing security standards have not yet been expanded to include cloud computing



Progress Review for South Africa (7/7)

Recommendation



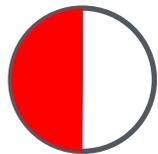
Position cloud as a solution to skills shortages

Proposed Actions

- ❖ Consider **adopting third party cloud computing services** as a solution to the skills issue and source of ready access to other advanced IT skills

Current Status and Progress in South Africa

Overall Status



Overview/Justification

- Cloud computing **is widely recognized by government** as a means as addressing the skills gap with the South African public sector and is currently widely adopted for non-critical applications and services



No/Very Little Progress



Notable progress made but more work still needed



Significant progress made

Thank You

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Questions/Comments?

For more info and research, please visit

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