



Cloud Computing in Emerging Markets and Developing Economies

Fact vs. **Fiction**

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Introduction

Q: *What does Crown Agents have to do with Cloud computing?*

A: Crown Agents has a **unique perspective** on Cloud Computing from **working in partnership** with governments of emerging economies to develop and implement innovative IT solutions to **facilitate growth and trade.**



CROWN AGENTS GLOBAL PRESENCE





There is one path to the Cloud....



Cloud Concept in a nutshell: *combining computing resources, achieving greater flexibility and cost reduction*

But getting there can mean different things to...

...a **highly developed** economy with:

- Legacy systems
- Advanced levels of existing infrastructure
- Rigid institutional structures

...an **emerging economy** with:

- Low levels of existing IT systems
- Lower infrastructure levels
- Lower institutional capacity





Fact

Specific Benefits to Emerging Economies

Cloud computing reduces costs and offers greater flexibility. But for emerging economies in particular, there are important benefits to be realised:

- ✓ Access to new computing power
- ✓ Connectivity with mobile services



- ✓ Scalable to millions of users
- ✓ Lower barriers to entry
- ✓ Country infrastructure risks are minimized



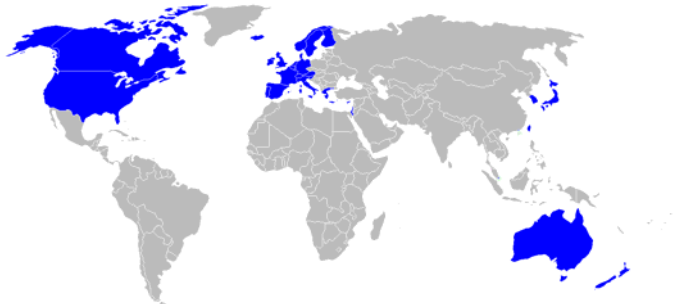
Challenges are the Same for Everyone

While there are shared concerns:

- ✓ security
- ✓ performance
- ✓ integration

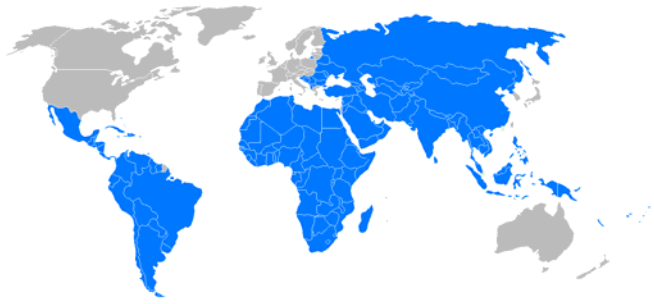
There are also different challenges:

Developed Economy



- Legacy systems
- Pressure to use existing infrastructure
- Institutions resistant to change
- Rigid or complex procurement systems

Emerging Economy



- Low levels of existing IT systems
- Lack of infrastructure / access
- Low institutional capacity for change
- Weak procurement systems



Opportunities for Emerging Economies

Fact



Low IT systems adoption

→ Fewer legacy systems allow emerging economies to better exploit opportunities for cloud implementation

Low infrastructure levels

→ Investments in infrastructure can be more future-focused without the need to utilise out-dated technologies

Low institutional capacity

→ Implementation can go hand-in-hand with capacity building initiatives

Procurement systems weak

→ Design of cloud services can be based on service management best practices and not constrained by legacy IT investment procurement regulations





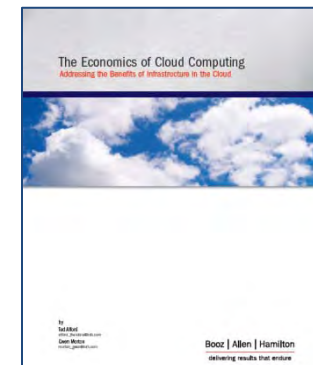
Fiction

Emerging Economy Challenges are too great



- ✓ Emerging economies are moving quickly to mobile based solutions
- ✓ Network Security can actually be better in the cloud
- ✓ Emerging economies are ready and capable to move to cloud based solutions

A recent study by Booz Allen Hamilton *“The Economics of Cloud Computing”* (2010) proposed that **benefit-to-cost ratios** for governments implementing Cloud Computing can range between **5.7** to as much as **15.4**, depending on the model of deployment used.



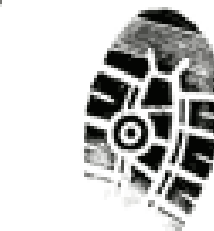


Crown Agents

Fact

Steps Can be Taken to Prepare for Cloud

- ✓ Invest in telecommunications infrastructure
- ✓ Develop technical & operational standards
- ✓ Design solutions for the “lowest common denominator”
- ✓ Make sure service providers are aware of specific challenges in emerging economies
- ✓ Invest in IT Service Management and Information Management skill sets in your workforce





Fact



Crown Agents

Cloud Concept has a Role in Customs

Q: *What does Cloud Computing have to do with Customs?*

A: Cloud Computing offers the potential to provide automated customs and other solutions to facilitate trade in a more **cost-effective** way and leverages regional and international **data standardisation** and harmonisation initiatives for today's globally networked economy.





For More Information



For more information on Crown Agents and our work implementing innovative IT solutions to facilitate growth and trade, please contact:

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