Architecture at scale: many things need to change if government digital transformation is to succeed

There are too many consultants touting blockchain, AI and machine learning and not enough integrated thinking

Jim Hietala and Pallab Saha

21 December 2018

Countries around the world are in the middle of major digitalisation programmes. These range from implementing new digital tax systems to the creation of biometric ID systems, such as India's Aadhaar project with 1.23 billion IDs by end of 2018.

In many cases, these projects lean towards the adoption of emerging technologies. Sometimes this is to the detriment of the original purpose - improving quality of life for citizens.

There are all too many consultants touting the use of blockchain, AI and machine learning, without any context of how the implementation of the technology will make a difference to people's lives.

In addition, enterprise architects, coming from an ICT background, have limited knowledge of government services and often struggle to think beyond the technology itself as a result.

In order to achieve success with large digital transformation projects, it is vital to employ holistic and integrated thinking, but many people leading these initiatives in government can lack the patience or the inclination. And, in order to show progress, they often take a fragmented approach to digital transformation programmes.

Many things need to change if governments are to enjoy any real success from digital transformation programmes. For example, the government should own the process rather than it being driven by vendors; it should be programme- and portfolio-based, rather than project-based; and standards should provide the ability to scale-up, rather than having to solve similar issues repeatedly.

Governments around the world are facing increasingly complex challenges that require better integration, further collaboration and closer relationships between jurisdictional and organisational boundaries. There is a substantial need for what Open Group calls 'Boundaryless Information Flow' - access to integrated information to support business process improvements - in today's governments, a requirement made more urgent by the increasing exposure citizens now have to tech in their day-to-day lives.

" All too often governments continue to reward agency-centric behaviour and act on fragmented authority

Citizens now expect governments to take a big-picture approach to tech transformation, transcending election cycles and involving the public in the decision-making process. However, all too often governments continue to reward agency-centric behaviour and act on fragmented authority, with the supposed aim of discouraging the concentration of authority to just a few entities.

Achieving better outcomes for citizens through public sector digital transformation can only happen when innovative tech is combined with clear vision, efficient operations, enabling policies and measurable goals, all combined into one holistic construct.

> ## ❝ The three fundamentals goals of GEA are insight (thinking deep), oversight (thinking wide) and foresight (thinking far)

This leads us to Government Enterprise Architecture (GEA), defined as 'a whole of government approach to support government ecosystems by transcending boundaries for delivering services in a coordinated, efficient and equitable manner'. The three fundamentals goals of GEA are insight (thinking deep), oversight (thinking wide) and foresight (thinking far), characteristics every government needs.

One good example of GEA in practice is the India Enterprise Architecture (IndEA). IndEA is the realisation of the UN's Sustainable Development Goals (SDGs) in India. The SDGs aim to provide direction and guidance to nations with ambitions to eradicate poverty and achieve sustainable development by 2030, but they cannot be achieved without integrated thinking. GEA is the institutional framework that provides the mechanism to realise this integration.

Governments are trying to change the way services are delivered and consumed, internal back office operations are executed, and resources and processes are sourced and combined. In this context and as countries around the world look to drive successful digital transformation programmes, governments are set to turn to GEA to bridge policies and outcomes for better services - and ultimately, to achieve better citizen outcomes.

Jim Hietala is vice president, business development and security and Dr Pallab Saha is chief architect at **The Open Group**