Chapter 111
Mobile and Cloud Technologies for Smarter Governance

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ABSTRACT

There are hordes of data-driven, context-aware, and people-centric applications and services for smarter environments such as smarter homes, governments, buildings, cities, and organizations. With the exponential growth of smart phones, there are service repositories and application stores in remote mobile clouds. Similarly, with the ceaseless advancements in the device ecosystem and in the IT field, government-specific applications will flourish and be deployed and maintained in special cloud stores, platforms, and infrastructures to be found, bound, and used by any input/output devices for a variety of everyday personal and professional purposes. Smart, sustainable, intuitive, and citizen-aware services can be dynamically created from the ground up as well as orchestrated or choreographed out of multiple atomic and discrete software services. Such composite services are directly fulfilling government activities. Thus, clouds emerge as the most common and minimum requirement for not only producing and stocking services but also for hosting application platforms. Further, clouds facilitate provisioning and renting out their configurable and customizable assets on demand. Through self-service portals, the cloud usage is to pick up fast in the days to unfold. In this chapter, the authors write about how cloud adoption is to ring in delectable transformations for worldwide governments as well as their citizens, that is, how governments can accomplish more with less, how people can experience high quality, technology-sponsored digital living, how the cloud idea becomes a centre of attraction for more ingenuity towards newer and nimbler service conceptualization, concretization, and delivery.

INTRODUCTION

Every organization aims to be smarter in its operations, offerings, and outlooks by cogently and cognitively embracing competent technologies, integrated processes, flexible and futuristic architectures, and optimized infrastructures. Governments too want to sail in that same boat to be grandiosely relevant to their constituencies and citizens by bringing in a series of innovations in their everyday administrative activities and deliveries. Governance has become a serious

activity and people started to expect more from their leaders. In order to cope up with the enhanced and evolving expectations and aspirations, the government officials, bureaucrats, governors and executives are increasingly cognizant of the noteworthy and novel implications of the technology choice and adoption. Incidentally there are several technologies including Web 2.0 or social Web, Web 3.0 or semantic Web, mobility, cloud technologies, analytics, integration, Bigdata, the Internet of Things (IoT) etc. that lead to different kinds of next-generation Web, cloud, mobile, real-time analytics and smarter applications. Furthermore, with the extreme and deeper connectivity technologies, not only software applications and services but also people and devices are instantaneously hooked with one another.

The world is likely to experience more shocks and stresses in the future, on scarcity and on other fronts, with increasing intensity. At the same time, policymakers, while trying to capitalize on the windows of opportunities that such crises may offer, need to try to ensure that moments of system breakdown lead to renewal rather than to outright collapse. Resilience is the quality that will determine the difference between these two outcomes.

Most governments spend a significant amount of their technology budgets towards procuring, installing and maintaining a variety of IT infrastructures, platforms, and applications. Purchasing hardware, upgrading software, and employing administrators for managing applications as well as infrastructures in an optimal state is not an easy task. There is a statistics that up to 70% of the total IT budget in any organization is being spent just for IT maintenance. Thereby developing and deploying newer and nimbler capabilities and competencies take a back seat. Also there is an exerted pressure on cutting down IT budget due to the prevailing and prolonged uncertainty in the world economy. In other words, executives expect more out of IT these days. Not only infrastructure

optimization, but also there are other factors to be given prime importance by those governments IT managers and consultants in order to smooth journey towards the ultimate vision of establishing and sustaining smarter governments (KMPG, 2010).

Data is definitely a strategic asset to be leveraged smartly in order to pursue the people agenda vigorously and rigorously. Big Data analytics is another interesting area for proactive and preemptive governance for quickly extracting actionable insights from government data heaps. Mobile phones are the latest entrants in anytime anywhere delivering a cornucopia of government services. With all these positive and progressive trends in the IT arena, cloud stands tall because cloud is the core and central technology for all other technologies to grow and glow.

Undoubtedly cloud embarkation is one proven and potential move in all kinds of enterprises including governments. The sharp infrastructure optimization being enabled by the disruptive and transformative cloud technology is keenly introduced and incorporated into every tangible domain in order to reap all its originally envisaged benefits. Governance is an important activity and the much-discoursed and deliberated cloud paradigm is bound to bring in significant advancements in the form of total transparency, accountability, responsiveness, simplicity, speed, scale, sustenance, etc. for formulating and delivering a variety of citizen-centric services. In this document, we are to see how the cloud idea is going to be profoundly paramount for the unprecedented success towards providing right and relevant services for people affordably within the stipulated and scheduled time with all alacrity and clarity. In the following paragraphs, we discuss how cloud infrastructures provides a suite of robust and resilient cloud services and solutions that are a boon and game-changer for federal and county governments across the globe in reaching out their constituencies with a bevy of generic as well as niche services.

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