Chapter 15
Cloud Strategy Leads Innovation in China

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ABSTRACT

Cloud computing is a historically significant trend in the development of information technology and applications. The cloud concept and the corresponding series of changes in technology, business, application, and service models are inevitable results of such developments in the information industry. In recent years, governments and major IT companies have introduced new IT strategies based on cloud computing, such as innovative platforms, services, and applications. More and more data and applications are migrating into the cloud, and the development of cloud computing is in full swing (Shen & Zhang, 2013).

INTRODUCTION

Today, Microsoft, Apple and Google dominate the global information industry, and thus three major ecosystems have been formed gradually. Although the Big Three are different in terms of characteristics, they have many similarities in investment and strategic layout: they tend to develop the cloud technology at the back-end in terms of cloud centers and platforms; they also develop terminal technologies at the front-end such as but not limited to mobile phone, tablet,

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desktop, TV, game console and etc.; and they have all adopted the App Store model in terms of providing intermediary services.

With the approach of "absorbing the useful and discarding the useless", China is learning from the experience and the strategic layout of these international cloud computing giants, and actively exploring cloud strategy in line with China's national characteristics. The latest result of our endeavour is the "E-government 2.0", a new generation of e-government platform that is people-oriented and based in the cloud, and also adopting new IT trends. This may become the core engine of China's economic development, social management and services. It is to lead China's industrialization and innovation, promote the emergence of a large number of innovative application services in various fields, such as economic and social development, government's social management, public services and SMEs, narrow the gap between urban and rural areas, and provide a strong impetus for speeding up China's economic restructuring of industries and scientific developments.

A NEW GENERATION OF E-GOVERNMENT PLATFORM

Compared with the previous "E-government 1.0", "E-government 2.0" is a new generation of e-government platform. After 20 years of development, the traditional e-government has some brilliant achievements: government website systems for central, local and various industries have been generally established; the construction of a basic information base has been steadily moving forward, and a series of "golden projects" have been promoting the informatization of the core business of government, creating significant economic and social benefits. The informatization of the government stimulates the informatization of the society as a whole, and therefore has significant influence on the modernization of China's economic system – industrial, organizational and social structures.

However, traditional government platforms have major problems in overall planning, coordinated sharing, independent innovation, unified planning and standards so on. Examples are the island data centers established for each committee, office, department and bureau of the government, which makes it difficult to share, coordinate and integrate data because of fragmentation. This prevents efficient planning, design, construction, application and management according to unified business requirements, data format, technologies and evaluation standards. This system fails to provide everyday users with intelligent on-demand services, so they often have to search in a vast sea of data.

With the vigorous development of cloud computing and mobile Internet, the information world is soon to enter an era of big data, and China is also to usher in the era of E-government 2.0. In order to seize the historic opportunity and achieve leapfrog development, China needs to accurately grasp the essence and nature of information industry's development, and learn from the international industrial giants' strategy of the three-tier framework, namely, "Cloud + Terminal + App Store", so as to formulate cloud strategies based on China's national characteristics.

In the international community, public cloud platforms are mainly invested and built by Microsoft and other social and/or private enterprises, providing services to users worldwide. But in China, the government holds the most credible power of action rather than any private enterprises, and therefore China's cloud platforms must be built, managed and operated with more or less involvement of the government. The Chinese government is undeniably the single dominating player in the entire industry.

To develop a Chinese model of cloud computing, there are two basic characteristics, namely, "independence and self-control" and "opening up and win-win". China should actively track

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