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Mobile government: A challenge for agriculture

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Abstract

Mobile government (or mGovernment) is a subset of electronic government comprising an alternative provisioning channel of governmental information and services. Governments are increasingly making efforts to provide more access to information and services for citizens, businesses, and civil servants through wireless devices. One of the future challenges for the implementation of mGovernment is the creation of effective business cases (e.g. tourism, health, agriculture). Within this context, the scope of this paper is to study the deployment of mGovernment services in the agricultural sector, taking into account its peculiarities, priorities, and needs. The objective of this paper is twofold: first, to present a framework for identifying appropriate and cost-effective mGovernment services for the agricultural sector and, second, to illustrate the application of the proposed framework, describing a case study for a particular agribusiness sector.

Keywords: Mobile government; Portal; Agriculture

1. Introduction

Electronic government (eGovernment) is rapidly becoming one of government's critical means for the provision of seamless services for public agencies, businesses, and citizens. It is the use of information and communication technologies as a tool to achieve better government. Globally, governments have set very ambitious goals and are running costly programs for

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delivering public services electronically (Aichholzer, 2004). Asia, the USA, and the European Union (EU) have warmly embraced the concept of eGovernment as evidenced by their significant funding for relevant initiatives (Costopoulou, Lambrou, & Karetsos, 2003). Some of the successful initiatives concern the development of portals, like firstgov.gov in the USA, esdlife.com in Hong Kong, direct.gov.uk in UK, service-public.fr in France, and oasis.gov.ie in Ireland.

However, emerging trends make clear that in the near future there will be a strong demand for multi-channel service delivery. Moreover, the boom of the use of mobile devices, including Internet-ready mobile phones, smart phones, and personal digital assistants (PDAs), is forcing governments toward the deployment of mobile government (mGovernment) (Sharma & Gupta, 2004). mGovernment refers to the use of mobile and wireless communication technologies within government administration and its delivery of information and services to citizens and businesses (Yoojung, Jongsoo, Seungbong, & Jaemin, 2004). It is a subset of eGovernment comprising an alternative provisioning channel. Globally, over 1300 million users have subscribed to mobile communication services (Business Briefing, 2005). It is a fact that governments are increasingly making efforts to provide more access to information and services for citizens, businesses, and civil servants through mobile devices. By now, many countries around the world, such as the USA, Sweden, Denmark, Korea, and Canada have established mGovernment services.

Like eGovernment, mGovernment operates on four different levels represented by the following interactions:

1. mGovernment to government (mG2G), referring to inter-agency relationships and the interaction between governmental agencies.
2. mGovernment to business (mG2B), describing the interaction of government with businesses.
3. mGovernment to employee (mG2E), concerning the interaction between government and its employees.
4. mGovernment to citizen (mG2C), which refers to the interaction between government and citizens.

There are various examples concerning each type of interaction regarding different sectors of society, such as education, public safety, justice, and employment. By now, around the world, the most developed type is mG2C.

However, the demand for mGovernment alone cannot ensure its success in practice. According to a US Accounting Office report (Jaeger & Thompson, 2003), the creation of effective eGovernment business cases is pinpointed as one of the future challenges for the implementation of eGovernment. Thus, flexibility to meet the particular needs of each business sector is emphasized as a future tactic as the demand for mGovernment services grows. Though mGovernment compared to eGovernment is less developed, this necessity remains the same. mGovernment demonstrates several benefits, the depth and range of which depend—to a certain extent—on the nature of the sector of implementation. Therefore, it is estimated that every business sector can benefit in a different way from mGovernment, as needs and conditions vary in each of them. This fact evinces the need for