# Chapter 4.53 Business Models for M-Government Services

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# ABSTRACT

This chapter reports on experiences gained in the sustainable implementation of mobile e-government services. Sustainable operations require appropriate business models and partnerships for the implementation and provision of services. The lessons learned are based on experiences gained in major European research projects for the implementation of information services for environmental information and for the provision of mobile services. This chapter will briefly present the mobile services provided in these projects and then turn to the specific dimensions of interest: added values materialized by the combination of m-government, business models, and, in particular, revenue models for financing the services. Specific attention will be devoted to public-private partnerships for implementing, maintaining, and operating the services. Each dimension will be discussed in terms of pros and cons. The section on business models will be completed by a

summary of specified experiences gained with different stakeholders.

## INTRODUCTION

This chapter revolves around the customer and business aspects of mobile government services. Rather than wallowing in pure e-government issues or IT science and technologies, we want to talk about *business*. This business stance compasses the exploration of business partnerships and models as well as the market investigation of service content, that is, the design of use-oriented and citizen-centred services.

Governmental information services and in particular online services towards the citizen still fell a step short of success. They are mainly created to meet the demands of legislations and regulations concerning information needs, but mostly do not entertain and attract the citizen, for example, by additional services taking into account individual situations, or by impelling people to a more active information exploration stance. A significant share of information services fell short concerning intuitive presentations and user interfaces for navigation, in particular taking into account normal citizens as customers. Instead, raw numbers and/or a large amount of reports dominate. One reason for this lack of customer orientation are diverging perceptions of the information strategy of authorities: merely offering access to information to the public versus pro-active information dissemination (Craglia & Masser, 2001). The latter requires processes taking into account also modern information technologies and customer-oriented thinking (even though we respect possible problems by transferring the concepts of e-commerce to e-government (Adams, Haston, Gillespie, & Macintosh, 2003; Stahl, 2005).

M-government services often require not only pull but also push functionalities such as sending of SMS notifications: In contrast to pure Web services, the sending of SMS has to be financed explicitly. Experiences from the Government of Malta mGov project (Government of Malta—Ministry for Information Technology and Investment, 2003) as well as project USE-ME.GOV (USE-ME.GOV Consortium, 2005b) showed that authorities tend to cover the expenses of mobile services, since other funding possibilities and business models with private organizations are eyed suspiciously.

The following sections will further elaborate on the range of business and revenue models for running m-government services in a sustainable way, and accompanied information strategies based on the results of EC-funded projects.

## BACKGROUND

# **Projects APNEE and APNEE-TU**

Project APNEE (Air Pollution Network for Early warning and on-line information Exchange in

Europe—APNEE, 2006) evaluated the potential of raising money with m-government information services; or at least to create a win-win situation between public and private partners. It implemented ubiquitous information services available on mobile phones (WAP, SMS, MMS), PDA, street panels, voice servers, and Internet. These services are operated in public-private partnerships while each partnership creates dedicated value for the end user, that is, the citizen as customer.

APNEE has been launched during the hype of the content industry. Only a few years ago, content was considered king for the telecommunication industry. Environmental information was ranked third place in customer interviews about attractive content. Moreover, the Information Society Technologies programme for information technology development and deployment of the European Union begun to promote citizen-centered services, that is, services and in particular information services that generate added value for many citizen. Hence, the ingredients for a success story were in place.

APNEE materialized on these ingredients and delivered a multichannel dissemination platform for air quality information, which was successfully evaluated in field trials in several European regions. Based on the successful implementation of an online information service for the citizen, a major European field trial was launched with project APNEE-TU (Take-UP measure).

The vision of APNEE was to establish an information service which informs citizens about the current air quality taking into account the current location of the citizen (different values depending on region), the preferences of the citizen (i.e., sensitive to ozone, pulmonary diseases, limits, alert intervals), and the availability of different information access channels (mobile: mobile phones, smart phones, PDAs, street panels; at home: PC with Internet, voice server) (Peinel & Rose, 2004).

APNEE finally operates air pollution information service in Norway, Germany, Spain, France, 13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

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