Chapter 11
Enabling Open and Collaborative Public Service Advertising through Cloud Technologies

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ABSTRACT

The importance of cloud computing and its benefits for public sector has already been recognised by national and supranational organisations. Meanwhile, public service advertising is seen as a powerful tool in the hands of public administrations in raising awareness and changing public behaviour towards a social issue. After introducing the main concepts of cloud computing, this chapter describes an interactive, cloud-enabled platform for public service advertising. During the validation phase, which involved seven European case studies, we learnt not only the benefits for both data producers and consumers coming with the platform, but also helped us identifying the gap between these two sides. In order to bridge this gap we propose a novel, open and collaborative platform for public advertising based on semantic Web technologies for service discovery and message delivery. Enabling technologies of the platform are next identified and, finally, the deployment on hybrid cloud environments is discussed.

INTRODUCTION

Public Service Advertising (PSA), non-commercial advertising, public service announcement or public service ad is defined as messages in the public interest disseminated by the media without charge, with the objective of raising awareness, changing public attitudes and behaviour towards a social issue (Kerin et al., 2010). It boils down to the utilization of sophisticated advertising and marketing communications...
Enabling Open and Collaborative Public Service Advertising

techniques, generally associated with commercial enterprise, on behalf of non-commercial, public interest issues and initiatives. The history of PSA goes back to late 1930s, when the first educational films on topics such as road safety or health care were produced in the UK (Archive.org, 2015). During the World War II, both the UK and the USA made use of such films to advertise on war efforts and influence society on a range of fronts.

Although, PSA is a powerful tool in the hands of public administrations (PA) in raising citizens’ awareness in order to adapt or change behaviour by stimulating their engagement, for example on services of public interest as e-Government services are, PSA in the European Union (EU) and the USA relies heavily on campaign models on the first two of the three different “ages” of media: Newspaper Age, Broadcast Age and the Internet Age. The advantages of the Internet Age to more conventional media are not yet exploited at the same level in the public sector as they are in the private sector. Campaigns require organizations to use aggressive, imaginative tactics, seeking television/radio airtime to convey a focused message, but they are short-timed, and often require huge budgets to access prime time (ENISA, 2011).

In the existing, traditional installations of PSA, advertising is conveyed as unidirectional top-down stream of messages that clearly separates the content producers (governments usually) from content consumers (citizens). We are envisioning a cloud-based framework integrated with semantic strategy for innovation in PSA, addressing the challenges of a multi-domain and multi-lingual context. Moving towards a Web 2.0 approach, based on principles of collaboration and sharing between prosumers (i.e. both consumers and providers of data) in PSA, is supported by collecting the feedback produced by citizens in interactive applications and social networks, enabled by a semantically-rich platform.

Deploying advanced technologies to broaden communications channels standardize IT systems to reduce costs and complexity, or adopt more cost effective channels to deliver e-Government services, are among the most important strategies identified in the study to improve the operations in citizen-centric government (Zibret at al., 2009). Besides improving the operations, there are other benefits resulting from utilization of innovative e-services and multi-channel communications, such as support for sustainability, fostering organizational change or better relationship with citizens.

This chapter explores how cloud services and Semantic Web technologies, combined together, become the building blocks for an open and collaborative platform that takes PSA one step further towards connected government (c-government), or Government 2.0 as it is sometimes referred to. This aims to empower citizens and communities to increasingly and actively participate in the functioning of the society and enhance their own benefits.

We first introduce the reader to the cloud computing paradigm, and then briefly discuss the different aspects of utilising cloud technologies for public service advertising. The next section of the chapter presents the cloud-based platform SEED, detailing its technical background and main concepts behind, followed by the seven case studies taken from six European countries and, finally, the main findings surfaced by the validation activities. In the next two sections we intend to address the challenges, tools and technologies of an open and collaborative platform for PSA based on semantic technologies and cloud services. The following section presents a toolkit aiming to help IT administrators to integrate the complex PSA framework in hybrid cloud environments. The last section of the chapter summarizes the main ideas, highlights the benefits of a cloud-enabled PSA solution and proposes practical guidelines for the implementation of PSA systems by public authorities.