Chapter 13
Diffusion of Personalized E-Government Services among Dutch Municipalities: An Empirical Investigation and Explanation

Vincent Homburg
Erasmus University Rotterdam, The Netherlands

Andres Dijkshoorn
Erasmus University Rotterdam, The Netherlands

ABSTRACT
This article describes the trend of personalization in electronic service delivery, with a special focus on municipal electronic service delivery in the Netherlands. Personalization of electronic services refers to the one-to-one citizen orientation using authentication, profiling and customization techniques. The percentage of Dutch municipalities offering services through personalized electronic counters has increased from 14% (2006) to 28% (2009). Using binary logistic regression analyses of 2008 survey data, it is concluded that personalization is positively associated with size of municipalities but not with e-government and policy innovation statements, nor with explicit political responsibility with respect to e-government development. Based on these findings, alternative explanations for the adoption and diffusion of personalized e-government services are suggested.

INTRODUCTION
Various studies have shown that there has been a steady growth in the presence of electronic government services. The increase has been observed in developed countries (defined as members of the Organization for Economic Cooperation and Development OECD) (OECD, 2009), European countries (Horst, Kuttschreuter, & Gutteling, 2007; Janssen & Rotthier, 2005), the Arab world (Al-Nuaim, 2009) and, to a lesser extent, sub-Saharan African countries (Heeks, 2002; Schuppan, 2009). In the literature, specific attention has
been given to electronic government in US (Moon, 2002; Reddick, 2009) and UK (Gilbert, Balestrini, & Littleboy, 2004) municipalities.

Apart from this increase in number of services, in the past decades there have been various ‘qualitative jumps’ (Bekkers & Homburg, 2005). For instance, Layne and Lee identify various stages of electronic service delivery. They suggest that public sector organizations tend to begin with offering cataloguing information, then shift to isolated transactions, and eventually to enabling horizontally and vertically integrated transactions to citizens (Layne & Lee, 2001).

In this article, we focus on a recent qualitative jump: the move to so-called personalized electronic public services. Personalized services (called ‘customized services’ by Watson and Mundy) are services with which through authorization, profiling and customization, one-to-one relationships between service providers and users are established (Guo & Lu, 2007; Watson & Mundy, 2001). Delivering personalized electronic government services can be understood as fitting the idea of truly citizen-centric government, an idea that has been at the heart of the New Public Management ideology that has, over the past two decades or so, swept over the American and European public sector and beyond (Pollitt, van Thiel, & Homburg, 2007). Furthermore, citizen-centric government was forcefully put forward in a 2009 OECD study (OECD, 2009). The European Commission stipulated in 2007 that the highest level of sophistication of services is the level of ‘personalization’.

The core of this article presents a description of the diffusion of technology-enabled personalization of e-government services among all Dutch municipalities between 2006 and 2009, combined with a more detailed analysis of municipal e-government personalization in the Netherlands in 2008. We explicitly focus on the provider’s perspective (e.g., municipalities) as opposed to a citizen-centric perspective on service delivery (Butt & Persuad, 2005). The eventual aim is to explain why some municipalities provide personalized services whereas others do not. In the analysis we seek to explain specific patterns with a binary logistic regression analysis. The focus on municipalities was chosen because municipalities are viewed in many Western countries as the frontrunners in the modernization of interaction between government, on the one hand, and citizens and corporations on the other (Paskaleva, 2008). The focus on a single country, the Netherlands, enables us to demarcate an empirical setting and exclude influences that emerge from national policy initiatives.

The research question of this article is: How can the diffusion of personalization in municipal electronic service delivery in the Netherlands be explained? It is important to theoretically analyze the factors that contribute to and facilitate e-government developments and thereby contribute to the literature on the adoption and diffusion of information technology in the public sector. Until now, few empirical studies have attempted to analyze e-government innovation, and from an analysis of national e-government policy document of various countries, Bekkers and Homburg (2007) have demonstrated that many policy initiatives are inspired by so-called ‘myths’. By explicitly confronting one of these ‘myths’ (the myth of rational planning) with population (as opposed to sample) data of e-government adoption in Dutch municipalities, the phenomenon of personalized e-government is better understood and this might enable local politicians, public managers and e-government project managers to cope with e-government myths in their e-strategy formation efforts and implementation puzzles.

This article is structured as follows. Personalization and personalized e-government services are defined and theoretical and political backgrounds of personalization are identified. Next we discuss data sources and methods used in the analysis. The results of the analyses are presented and conclusions and an assessment of the relevant attributes of e-government personalization are provided.