

# Chapter 62

## Enterprise Architecture for Personalization of e-Government Services: Reflections from Turkey

**Alpay Erdem**

*Middle East Technical University, Turkey*

**İhsan Tolga Medeni**

*Middle East Technical University, Turkey & Turksat, Turkey & Çankaya University, Turkey*

**Tunç D. Medeni**

*Turksat, Turkey & Middle East Technical University, Turkey & Yildirim Beyazit University, Turkey*

### ABSTRACT

*As there has not yet been enough work on enterprise architectures for fully integrated knowledge-based, highly-sophisticated (citizen-oriented) personalized services, this chapter aims to articulate a perspective to design architectures for the development and provision of sophisticated, personalized services. Doing so, the authors benefit from their knowledge and experience in the Turkish e-Government Gateway (eGG) and general e-Government services development and provision. First providing an introduction and background information, the chapter discusses the development of eGG services in Turkey, and then provides a visionary suggestion for knowledge-based personalized, citizen-centric e-Government. Among the suggested perspectives, an E-Citizen Decision Support System, and Entity-Utility and Information Flow Model could be useful for eGG development in Turkey and elsewhere.*

### INTRODUCTION

According to the UN report (2008), in recent years e-government services have brought about a more collaborative mindset, owing to the tremendous

opportunities for sharing information and aligning (if not integrating) service offerings across different providers. Then, a core challenge for e-government's enterprise architecture is that a more seamless governance be nurtured through collaborative opportunities between units (i.e.

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departments and agencies), or more aggressively pursued through a single, central service provider. One centralizing force is the pursuit of greater interoperability across enterprise-wide architectures (important elements of a platform for service delivery) for the public sector as a whole. Yet the manner in which centralization and collaboration are viewed as complementary is a significant novelty in this digital environment.

Meanwhile based upon the Swedish Administrative Development Agency (VERVA)'s previous work, Vinnova (2009, pp. 77-80) report four basic scenarios of e-Government development according to these two criteria:

1. **Degree of central coordination by the state:** what the state should organize and what should be organized by municipalities and county councils, the market and trade organizations, as well as ways for steering and financing public services. With a low degree of central coordination, conditions for developing different forms of market solutions will be more favorable.
2. **Degree of central integration of public agencies' systems and processes:** how well systems, processes and financing are integrated between the public agencies. With a high degree of integration, the various systems in public administration are linked together by automate communication and exchange systems.

With respect to these two criteria, there are four scenarios:

1. Information Chaos (decentralised coordination, low integration)
2. Guide (centralised coordination, low integration)
3. Clusters (decentralised coordination, high integration)
4. One-stop-shop (centralised coordination, high integration)

Capgemini (2007) also specifically evaluates the services of EU countries and suggests the user challenge benchmarking for the provision of online public services. Starting with basic informational, one or two-way interactional levels of provision, the services advance towards fully transactional and personalized provisions.

In accordance with these challenges and scenarios, Turkey aims to develop and sophisticate its e-Government Gateway (eGG) as the user-oriented one-stop-shop with fully personalized and orchestrated services for its citizens, as well as businesses and government agencies. eGG currently provides (as of June 2011) around 260 e-services integrated into e-Government Gateway with more than 8,000,000 registered/regular users, as well as thousands of content pages with guiding links to related agencies for further info or service.

Providing a common framework for the governments to achieve e-government transformation is a desired but hard-to-achieve goal for not only Turkey but most of the well-known Information Technology (IT) leaders of the globe, as well. The supplied services mostly are defined by the demographic characteristics of the country; for instance, a country with a young population would probably prioritize the services that are appealing for the younger people, however, a country with an older population would choose another approach. For this reason, we can assume that IT companies with a high-level of expertise in different countries could be able to provide a more flexible framework. To test this assumption it can be useful to look at some of these companies' product white papers and Web pages, from the perspectives of personalization and privacy.

For instance, Microsoft's "Connected Framework" concentrates on providing e-government services with secure interconnected systems and applications (Microsoft Corporation, 2007). This model seems to look at the government as an IT structure; however, it does not put a proper life cycle concept into its framework, which is an important part for the personal user activities.

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