Chapter 1

Towards Secure E-Government

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ABSTRACT

Secure e-government has emerged as a critical goal for public administrations across the world. While e-government services bring the promise of efficient online services, closer to its intended beneficiaries, being citizens, organisations, and other public administration units, new challenges pose potential threats. This book presents the views of academics and non-professionals from EU, USA, and China on pertinent e-government issues. The emphasis is on the evolution of Web services and security technologies as a plausible technology upon which e-government services can be based. The chapters of this book represent concepts that have been presented in the framework of the e-mayor project. This chapter addresses some of the basic concepts and objectives of this book and introduces the reader in the secure e-government Web services.
INTRODUCTION

Building trust and confidence in e-government is a main priority of modern day governments. The deployment of secure e-government services requires developing a secure electronic environment for such applications in view of exchanging government e-mail and accessing repositories of government information for authorized public servants and citizens. This environment can further be leveraged upon to develop shared applications, business processes, and workflow systems that enhance the performance of public administration. The establishing of interoperable public key infrastructures (PKI) offering secure and interoperable e-government services is a critical intermediary step toward such a secure environment. In addition, vulnerability assessments and the specific use of security tools can further enhance the level of trust in the offered services. The remainder of this chapter addresses the application framework for e-government and associated policy and organisational issues; it touches upon technical issues related to Web services and closes with some recommendations for future research and possible action.

APPLICATIONS FOR E-GOVERNMENT

While e-government is a means to modernize public administrations and strengthen support for public policies, it strives toward enhanced cooperation among public administrations and the private sector. In principle, e-government relies on personalised services for end users that are citizens, businesses, and other public administration units and aims at improved service toward those parties. Furthermore, e-government also broadens the potential of democratic participation and enhancing the way that public policy making is carried out. Ideally, transformation should occur jointly at federal, national, regional, and local levels. Specifically in Europe, the federal level can be seen as an EU wide area of development of e-government services. The impact of e-government depends on technology features as well as organisational resources available. It is necessary at all times to maintain a sense of strategic vision into perspective and keep the legal framework as an instrument to achieve the desired results in terms of transforming public sector processes to sensible e-government operations. In e-government, it is necessary to strive for meaningful applications that bring about improvements in the interactions of the stakeholders with public administrations.

Envisaged transactions for e-government require that the expectations of citizens and businesses alike be taken well into account when interacting with each other (UNCTAD, 2001). Early day doctrine suggests that typical e-government applications for citizens include examples such as proof of identity, taxation, social security services, health care services, issuance of permits, registration services, family status certificates, etc.

Furthermore, typical e-government applications for organisations include social security contributions, employment services, health and safety regulation, corporate
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