It gives us a great pleasure to welcome you to this special issue of the *Journal of Cases on Information Technology*. The cases presented in this special issue deal with contemporary electronic government (e-Government) and transforming government (t-Government) themes from a multiplicity of angles, providing a mixture of conjectural and prudent contributions. In the form of e-Government/t-Government, process and Information and Communication Technology (ICT) integration is broadly viewed as a mechanism to automate business processes and offer end-to-end integrated service delivery in public sector organisations (e.g., local authorities, government agencies). For many countries, formal e-Government implementation efforts began in the late 1990s and has revolutionised the delivery of public sector services in the 21st century (Chan et al., 2008). The e-Government led implementation of ICT in public sector during the last decade has offered better, faster and more transparent means for citizens and businesses to interact with government (Chen et al., 2009; Chan et al., 2008). Equally, it has also created a platform for better collaboration and information sharing between various government agencies (Bigdeli et al., 2011; Akbulut et al., 2009; Dawes, 1996). Implementation efforts in most countries have now evolved from basic information provisioning to more integrated service offerings that involve cross agency process and ICT transformation to enable joined-up and citizen-centric electronic services (Weerakkody et al., 2007; Otjacques & Feltz, 2007; Weerakkody et al., 2007; Heeks, 2006). E-Government implementation, however, involves a degree of transformation that is more radical than any other form of change seen before in the public sector. Implementing such change is a complex undertaking that is further compounded by the bureaucratic and hierarchical structures that are seen in most public organisations (Kamal et al., 2009; Horton & Wood-Harper, 2006). The speed of which the Internet and ICT has evolved in recent past has resulted in a multitude of Information Systems (IS) emerging to support more joined-up service
chains, particularly in the electronic services context. In spite of this rapid change, existing IS within several government organisations have not been developed in a synchronised way. As a result, the mass of organisations' IT infrastructure comprises of independent and sometimes heterogeneous solutions that are often incapable to meet the needs of the organisation (Corbitt & Themistocleous, 2011; Soja et al., 2011).

The number of stakeholders involved in the public services chain and the resulting complexities of the decision making processes necessitates that e-Government implementers have a good understanding of the political context, business processes and design and engineering methods capable of breaking through the traditional boundaries that exist between public sector organisations (Kamal et al., 2011). Despite the availability of innovative ICTs, public sector organisations are faced with many strategic and technical challenges that need to be addressed while implementing integrated e-Government systems and services (Tsaravas & Themistocleous, 2011; Kamal et al., 2009). Moreover, to realise more customer-focused and ‘joined up’ service delivery in the UK, public sector agencies will require a substantial level of integration of back-end enterprise systems such as, council tax systems, benefits systems, electoral registers, land and property systems etc. In this context, the implementation of fully integrated Enterprise Resource Planning (ERP) systems can prove to be helpful in integration and streamlining business processes and seamless information flows (Basoglu et al., 2007; Umble et al., 2003). These technologies can also offer fast and cost effective solutions by helping to retain many existing (functional) legacy applications in public agencies, but instead of staying in relative isolation from each other, they can be integrated to create new services that are more attuned to the needs of the citizens. Thus, SOA, computer power and IT infrastructures which will offer software as a service should be taken into consideration in order to attain automated and optimised processes (Kamal et al., 2008). Yet, from an organisational perspective, the paradigm shift and change of culture that needs to be realised to change these processes would mean that public agencies will need to breakdown their departmental or silo culture and overcome resistance to change as seen in other forms of organisational change such as business process reengineering (Weerakkody & Dhillon, 2008). In this respect, more research is needed to understand how broader organisational forces such as established social and cultural norms, workflows and legacy systems will be affected by the implementation of large enterprise systems in local government (Kamal et al., 2008). In an on-line context, the quality, efficiency and harmonisation of public services provided relies heavily on the level of integration and collaboration achieved between various government agencies involved in the e-Government service chain. In this context, the realisation of fully integrated e-Government services has been a major challenge for many governments as most countries have taken nearly a decade to reach the mature stages of e-Government where services are offered through a single point of access. Consequently, there has been increasing pressure on the academic and practitioner communities for research that focuses on tools, integration technologies and methods that facilitate process and ICT integration in the context of e-Government (Tsaravas & Themistocleous, 2011).

This special issue of the Journal of Cases on Information Technology reflects and analyses the global e-Government adoption and diffusion efforts by combining theory and e-Government practice. The research presented includes real-life descriptions of cases of ICT adoption and exploitation in public sector organisations to facilitate e-Government adoption from different parts of the world. As such, this special issue captures a diversity of perspectives on how technology is used to integrate diverse processes and systems across different departments within governmental organisations and between government organisations to enable the delivery of more joined-up and citizen centric services.
The first article in this special issue is by Andrea Kő, Barna Kovács, and András Gábor is titled *Agile Knowledge-Based E-Government Supported by Sake System*. The authors assert that with the rapid evolution of e-Government services, there is limited time for adaptation to the new environment in terms of legislation, society, and economy. The article goes on to discuss the difficulties that public sector organisations face in maintaining reliable services and secure IT environments when faced with changing supply chain activity, staff turnover, and regulatory variations. The authors argue that existing approaches and IT solutions are inadequate to facilitate the dynamic environment that is created by e-government highlighting the need for more harmonised change management and knowledge management strategies. The authors then propose a strategy for change and knowledge management using the results of a project that is funded by the European Commission under its sixth framework programme. The article uses an empirical study that was conducted in Hungary to validate their knowledge management strategy.

The second article in this special issue is by Dieter Fink is titled *Road Safety 2.0: A Case of Transforming Government’s Approach to Road Safety by Engaging Citizens through Web 2.0*. In this article, the case of transformational Government is assessed through the study of a case that looks into improving road safety by enforcing citizens’ participation. The author uses a case study in Western Australia (WA) to demonstrate how society is becoming increasingly reflexive and expects quick solutions to real or perceived problems. The author aims: (a) to determine the extent to which web 2.0 can be deployed as the technology that would enable a strong relationship between government and its citizens in developing and managing road safety measures and (b) to examine the endeavors of the WA Office of Road Safety (ORS) in fostering the relationship. The author asserts the benefits of using blogs and RSS as a suitable push strategy to get road safety information to the public. Using the example of ORS, the article outlines the theoretical foundations for citizen-centric government and identifies potential change management issues. It thereby provides the starting point for discussions about the most effective way to harness the potential of web 2.0 in the context of road safety.

The third article in this special issue is titled *Methodology and Software Components for E-business Development and Implementation: Case of Introducing E-invoice in Public Sector and SMEs*. This article is by Neven Vrček and Ivan Magdalenić. The authors highlight that the benefits realised as a result of e-business solutions’ implementation are related to network effect indicating that there are many interconnected parties utilising same or compatible technologies. The authors posit that the public sector, in this regard, by utilising the mechanisms of public procurement can play a significant role in imposing considerable e-business momentum and influencing the overall economy. The case study presented in this article describes the adoption of e-business in public sector and SMEs by using an integrated open source approach called e-modules. The e-module model proposed in this article illustrates a holistic framework for deployment of e-business solutions and the e-module structure mandates an approach that requires reengineering of business processes and adoption of strong standardization to solve interoperability issues. The authors apply the proposed framework in a complex case study of e-invoice demonstrating practical applicability and justification of design choices.

The fourth article in is by Teta Stamati and Athanasios Karantjias and is titled *Inter-sector Practices Reform for e-Government Integration Efficacy*. In this article, the authors argue that electronic services have become a critical force in service oriented economies introducing new paradigms like connected governance, ubiquitous and ambient public services, knowledge-based administration and participatory budgeting. The article discusses why the success of e-Government integration requires the modernisation of current governmental processes and services under three different perspectives, namely governmental business processes reengineering, legal framework reformation and technical solution effectiveness. The research presented in this article proposes a
knowledge guide for approaching, analysing and defining government-wide architectural practices when building large scale enterprise Governmental frameworks. A part of this guide, the authors also present a set of fundamental design and implementation principles. These principles can be utilised to increase government organisations’ agility and ensure that end-users perceive the quality of the services provided.

The final article in this special issue is by Leah Olszewski and Stephen C. Wingreen. This article is entitled The FBI Sentinel Project. The authors report on a Trilogy program initiated by the United States Federal Bureau of Investigation (FBI) in 2000. This program was initiated to upgrade FBI infrastructure technologies, address national security concerns, and provide agents and analysts greater investigative abilities through creation of an FBI-wide network and improved user applications. The article explains how, due to lack of an appropriate enterprise architecture foundation, IT expertise, and management skills, the FBI cancelled further developments in this program. The article goes on to explain how, In 2006, the FBI began the development of Sentinel through Lockheed Martin, as it still needed an electronic information management system for enhanced sharing, searching and analysing capabilities. The authors report on how the FBI implemented a service-oriented architecture (SOA) that was provided in part by commercial-off-the-shelf (COTS) components and employed IT personnel differently in order to meet Sentinel objectives. Although, Lockheed Martin was eventually released from their role in the project due to inadequate performance, the authors report that this project is still moving forward on account of the use of best practices, which are identified in this article.

REFERENCES


