Preface

Internet plays a vital role for the development of global economy. Using Websites, people have broad access to information and products. Given the fast growth of Internet and e-services, significant research focuses on the evaluation of Websites and Web services using very different methodological approaches and tools. The main objective of these research efforts is the improvement of services provided to users and, thus, the quality and efficiency of Websites and Web services. Taking into account the rapidly evolving technological and business environment, current research gives emphasis on the quality evaluation of e-services, studying the factors that may affect user satisfaction.

The main aim of this book is to present original methodological approaches for Websites and Web services evaluation. In particular, this edited volume aims at presenting the different interdisciplinary perspectives on the problem and illustrating successful real-world applications from different areas, like governance, banking, tourism, health, and education.

The book is organized into 4 sections, including 15 chapters that cover all these topics in a comprehensive manner. The first 4 chapters refer to the evaluation of e-government services. In particular, the first chapter by Patsioura presents an overview of evaluation approaches regarding Web portals and Websites implemented to operate central or local government authorities. The chapter discusses both quantitative and qualitative aspects, addressing operational and functional tactics.

In the 2nd chapter, Carstens, Kies, and Stockman emphasize the need for government Websites to promote public trust, while providing understandable, meaningful, and usable government accountability information. They discuss literature helpful in the evaluation of government accountability and transparency Websites and provide a mechanism for evaluation of government Websites from a technical and usability perspective. The chapter pinpoints the importance for a Website not only to have the government accountability information but also to display it in a useful and meaningful format understandable by citizens.

Chapter 3 by Gautatis and Vitkauskaite proposes a new methodology for the evaluation of the e-government sites based on a public electronic service quality assessment model that considers 3 perspectives: environment quality, delivery quality, and outcome quality. The proposed model is verified empirically, assessing 3 different public electronic services in Lithuania.

In chapter 4 by Kalidien, van Witzenburg, and Choenni, a successful implementation of an e-government Web site is presented. In particular, for the purpose of good and trustworthy management information for the government, responsible for the justice domain, a monitor has been developed that makes it possible to periodically monitor data flows within as well as between organizations of the justice domain. The aim of this monitor is to get insight into the performance and possible bottlenecks in the criminal justice domain.
The following 3 chapters cover alternative approaches in Website evaluation based on user preferences, usability tests, and empirical research. In particular, chapter 5, by Drosopoulou, Malama, Patsioura, and Vlachopoulou, reviews prior tourism studies referring to the evaluation of Destination Marketing Organizations’ (DMOs) Websites. The authors discuss alternative theories, models, and surveys on evaluating tourism Websites, giving emphasis on the key factors that play an important role for the success of these particular Websites. In addition, they present an evaluation of 5 Mediterranean DMOs' Websites using content analysis in terms of information, communication, transaction, relationship, and technical merit dimensions based on a modified approach of the Information, Communication, Transaction, Relationship, and Technical (ICTRT) merit model.

The next chapter, by Vozikis, focuses on the evaluation and benchmarking of Greek pharmaceutical companies’ Websites in order to draw conclusions about the level of Information and Communication Technology (ICT) use and, specifically, the ways they become active in e-business. The presented results show that Greek pharmaceutical companies have a rather limited Web presence, while they provide limited additional information and interactive features to potential users.

In Chapter 7, Lentz and Elling study users’ comments on the quality of specific Webpages and investigate the users’ abilities to provide such feedback, as well as the kind of feedback that is obtained. To this end, they compare the results of the, so-called, user page review methods with the concurrent think-aloud method, applied on the same Websites, and they show that it is important to keep feedback tools both simple and attractive so that users will be able and willing to provide feedback.

Chapters 8-11 refer to research in the field of user or e-customer satisfaction. In this context, Drosos and Tsotsolas present an original customer satisfaction survey in Greek Online Travel Agencies. In addition, the authors present a literature review regarding information technology in the tourism industry and customer satisfaction on online tourist services, and discuss the user satisfaction levels on particular aspects of the service.

In the following chapter, Yaya, Marimon, and Casadesus propose a model that analyzes the direct and indirect effects of e-service quality on satisfaction and value with the moderating/mediating role of value. In addition, they study the positive impact of gender, age, education, and income on quality, satisfaction, and value. The presented results show that service quality is a major predictor of perceived value, which in turn is positively related to customer satisfaction.

Chapter 10, by Grigoroudis, Fortsas, Pallis, and Matsatsinis, presents the development of a multi-criteria methodology aiming at measuring user loyalty in social networking services and estimating the importance of influencing factors. In the proposed approach, a multi-criteria analysis model is adopted in order to measure user loyalty, assuming that the overall commitment depends on a number of criteria. The applied multi-criteria approach is based on the UTADIS method, and the presented results confirm the strong relation between user satisfaction and loyalty. The results, however, also reveal that satisfaction is a necessary but not a sufficient condition for customer loyalty.

The next chapter, by Spinelli and Jain, focuses on issues affecting the online experience of users in later life, like physical and cognitive abilities, aspirations and constraints, etc. The chapter provides an overview of the methods inspired by User-Centered Design and presents challenges that go beyond the remit of design but still powerfully affect the Web experience of older users.

The last 4 chapters of the book refer to special topics on Websites evaluation, Web services, and e-services. In particular, Chapter 12, by Coursaris, Swierenga, and Whitten, presents a multi-group research study of the usability evaluation and consequent results from participants’ experiences with the MyPryamidTracker.gov Website application. The chapter concludes with major recommendations...
pertaining to the implementation of Website design elements, including pathway/navigation, search, links, text chunking, and frames layout. An extensive set of actionable Website design recommendations and a usability questionnaire are also provided that can be used by researchers in their future evaluations of Websites and Web services.

In the following chapter, Kyriakaki and Matsatsinis propose a multi-criteria evaluation model for e-learning Websites based on well-known pedagogical principles, namely Bloom’s Taxonomy of 6 cognitive objectives: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. The aim of the proposed approach is to serve as preference model for a decision maker (e.g., educator, educational organization, learner) wishing to employ an appropriate Web-based learning environment to meet his/her needs. In this context, the decision makers’ attitudes towards the pedagogical characteristics of the system are related to a specific set of Web-based learning services and criteria that can enhance the decision process.

In chapter 14, Jochmann-Mannak, Lentz, Huibers, and Sanders present an experiment in a sample of children, aged 10 to 12, in which search performance and attitudes towards an informational Website are investigated. The authors analyze the effects of different design approaches of an informational Website on children’s interaction with these interfaces and on children’s affective responses towards these interfaces. They also explore the effects of children’s use of a search engine on search performance and affective responses.

The book closes with a chapter by Zimeras, who presents software metrics that may be used to quantify the quality of the information provided by Web services. These measures are based on probabilistic models and may be useful to understand problematic frameworks during the implementation of the Websites and lead to solutions preventing those problems.

This edited book may be used as a textbook for courses covering topics like information management, e-government, information technology, as well as Website evaluation methodologies and tools. In addition, the book aims at providing a comprehensive overview of the recent developments, from different scientific perspectives, in the area of user-oriented Website and Web services evaluation. We hope that this book will provide a useful resource of ideas, techniques, and methods for additional research on this topic.

Denis Yannacopoulos  
*Technological Educational Institute of Piraeus, Greece*

Panagiotis Manolitzas  
*Technical University of Crete, Greece*

Nikolaos Matsatsinis  
*Technical University of Crete, Greece*

Evangelos Grigoroudis  
*Technical University of Crete, Greece*