

Social Media for Government Services

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Editors

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 Springer

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Cover image: Screenshots of systems developed by Data61 at CSIRO This image is taken with the permission of CSIRO Data61 and contains images from the following social media systems: Emergency Situation Awareness (ESA), the Next Step Online Community and Vizie, a social media monitoring tool.

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Preface

Governments at all levels (local, state or federal) are seeking better communication means, greater transparency, more participation from and collaboration with citizens in a range of government activities, ranging from disseminating information to formulating policies and delivering services. In addition, governments are under constant pressure to deliver more with less. In recent times, social media has been particularly appealing to advance these goals because of the increased participation of the population on sites like Facebook, Twitter, YouTube and Flickr. As a result, increasing numbers of government departments and agencies have started using social media as part of their channels of interactions with citizens. Although the use of social media has been increasing rapidly in recent times, there are still a number of significant challenges associated with it regarding citizens' privacy, veracity of content, governance policies and framework, the integration of social media with organisational business processes and risk management plans, to name a few.

Aim and Scope

In this book, we bring together researchers and practitioners and present the state-of-the-art research, development and deployment of social media use by governments through a number of case studies and systems descriptions.

The book covers many research activities CSIRO has done in social media for Australian government agencies, more specifically for the Department of Human Services under the \$16 million 5-year "CSIRO-Centrelink Human Services

Delivery Research Alliance (HSDRA)”¹. Chapters “[Social Media for Government Services: A Case Study of Human Services](#)”, “[Next Step: An Online Community for Delivering Human Services](#)” through to “[Improving Situation Awareness and Reporting Using the Emergency Response Intelligence Capability Tool](#)” report on different activities that were undertaken under HSDRA. In addition, the book contains invited and peer-reviewed chapters from both academic researchers and industry practitioners.

The book is useful and of interest to a wide range of people, including academic researchers, IT industries, developers of government policies and decision makers, communication staff in government departments and agencies, and anyone in the government sector interested in making use of this communication transforming medium of interaction: social media.

Organisation

The book is organised into two parts, namely Part I: Introduction and Case Studies and Part II: Systems and Applications. The book is composed of 17 chapters. Part I contains 8 chapters and Part II contains 9 chapters.

The first chapter, “[Social Media in Government Services: An Introduction](#)”, provides a basic introduction to social media such as a definition, the origin of the term, and the types of social media prevalent in the Internet. In addition, the chapter focuses on the adoption of social media for government services, introducing a number of popular application scenarios. The chapter also describes a few key challenges and issues that must be addressed, and a framework to define guidelines and policies to overcome those challenges. The chapter is then followed by a case study from the Australian Government Department of Human Services. The chapter, “[Social Media for Government Services: A Case Study of Human Services](#)”, illustrates how that department is making use of social media to support its customers and improve service delivery. It provides illustrative examples of some success stories, together with the challenges they had to face. The chapter also presents a governance framework and touches one of the difficult questions to be answered: how to measure the success of social media engagement?

¹ See information about HSDRA and its outcomes in the following websites, all accessed September 29th, 2015:¹ <http://www.csiro.au/en/Research/DPF/Areas/The-digital-economy/Digital-service-delivery>.¹ <https://publications.csiro.au/rpr/download?pid=csiro:EP149489&sid=DS1>.¹ <https://www.youtube.com/watch?v=lZgwyOSMsw>.¹ https://www.youtube.com/watch?v=CEQX_rGLkKM.¹ <https://www.youtube.com/watch?v=zrMy450eriw>.¹ <https://www.youtube.com/watch?v=caK2bRHcOEs>.¹ <http://www.technologydecisions.com.au/content/gov-tech-review/article/reinventing-government-customer-service-the-social-way-625131602>.

The third chapter, “[Use of Social Media for Internal Communication: A Case Study in a Government Organisation](#)”, provides a case study of using Yammer for internal communication by VicRoads, a Victorian state government authority. The chapter explains the end-to-end processes of establishing social media for internal use, including choosing the right Yammer components, gaining adoption by users, developing the network with the guidance of a community manager, and continuing the growth of the network through engagement strategies. This is followed by a case study from Dubai’s public sector. The chapter, “[The Role of Political Leadership in Driving Citizens’ Engagement Through Social Media: The Case of Dubai’s Public Sector](#)”, examines the use of social media in Dubai’s government from a public policy perspective. The chapter argues that political leadership was found to be a major factor in the successful use of social media in the public sector.

The fifth chapter, “[Social Media Policy in Turkish Municipalities: Disparity Between Awareness and Implementation](#)”, aims to analyse the present state of social media policy implementation and evaluation in Turkish municipalities in the Marmara region. The key message from the chapter is that, although there is an increasing rate of awareness of the benefits of social media use, there is a clear deficiency with regard to implementing and evaluating a social media policy. This chapter is followed by a chapter entitled “[From Social Media to GeoSocial Intelligence: Crowdsourcing Civic Co-management for Flood Response in Jakarta, Indonesia](#)” that describes a use case in the context of flood disaster management. This chapter provides a review of [PetaJakarta.org](#), a system designed to harness social media use in Jakarta for the purpose of exchanging information amongst citizens and between citizens and emergency management agencies about floods.

The seventh chapter, “[Detecting Bursty Topics of Correlated News and Twitter for Government Services](#)”, presents a framework of detecting bursty topics of correlated news and Twitter posts. The authors also explain how the proposed framework can be integrated into government services using the 2012 London Olympic games as an example.

It is well known that all governments are under pressure to deliver better services with reduced costs. The next chapter, “[Webcare in Public Services: Deliver Better with Less?](#)”, describes a case study around webcare, a form of social media that uses online communication with citizens to address client feedback in Dutch public organisations.

The next five chapters, from “[Next Step: An Online Community for Delivering Human Services](#)” through to “[Improving Situation Awareness and Reporting Using the Emergency Response Intelligence Capability Tool](#)”, are drawn from different activities at Data61 within CSIRO. Chapter “[Next Step: An Online Community for Delivering Human Services](#)” presents an online community developed as part of HSDRA. The aim of the community was to provide informational and emotional support to a specific group of welfare recipients. The paper describes the design, development, deployment, trial and results of the community. The success of any online community lies in the engagement of the citizens. In *Next Step*, several techniques were employed for this purpose, including

recommenders, which have been widely used to increase the engagement. Another approach to boost engagement is gamification, the topic of the following chapter “[Gamification on the Social Web](#)”. It provides a brief introduction to gamification and how it has been used in game dynamics. The chapter then presents the experience and observations on using gamification techniques in *Next Step*.

The eleventh chapter, “[Improving Government Services Using Social Media Feedback](#)”, describes a social media monitoring tool, called Vizie. The tool was designed as part of an HSDRA project² to help analysts identify how current government services could be improved by drawing on the commentary and feedback provided in a variety of social media including Twitter and Facebook. This is followed by another chapter from CSIRO on Emergency Situation Awareness (ESA). The chapter “[Using Crowd Sourced Content to Help Manage Emergency Events](#)” presents the ESA platform, which collects tweets from Australia and New Zealand and processes them to identify unexpected incidents. The ESA platform has been trialled by numerous emergency services organisations throughout Australia. Three case studies are outlined in the chapter to explain how ESA is being used as an earthquake, bushfire events and a general all-hazard monitoring tool. This chapter is followed by a chapter entitled “[Improving Situation Awareness and Reporting Using the Emergency Response Intelligence Capability Tool](#)”. It describes the Emergency Response Intelligence Capability (ERIC) tool,³ also developed as part of HSDRA for the Australian Government Department of Human Services. The tool automatically gathers data about emergency events from authoritative web sources, integrates them and presents them on an interactive map. Emergency management teams can use ERIC for intelligence gathering and situation reporting during emergency events.

The fourteenth chapter, “[A Lexical Resource for Identifying Public Services Names on the Social Web](#)”, describes an approach for developing a Lexical Resource for Public Services Names, and how it could be exploited to collect data-related government services. The chapter employs the British and Irish government websites to demonstrate the use of the developed technology, which uses the identified names to track messages in Twitter related to governments. This is followed by chapter “[Transport Policy: Social Media and User-Generated Content in a Changing Information Paradigm](#)”. The chapter describes the challenges in using social media in the transport sector and demonstrates that social media provides a complementary channel for collecting transport data.

The sixteenth chapter, entitled “[‘Garbage Let’s Take Away’: Producing Understandable and Translatable Government Documents: A Case Study from Japan](#)”, describes how a government department can use a technique to produce

² https://www.youtube.com/watch?v=CEQX_rGLkKM.

³ <https://www.youtube.com/watch?v=IZgwyAOSMsw>.

documents that can be automatically translated to different languages such that the resulting text is understandable. This is important in countries where the society is homogeneous and minority people do not have access to government information in an understandable form. The chapter describes the proposed technique and demonstrates its effectiveness through a case study for Japan. The tool has application beyond Japan, as many countries are encountering similar issues due to globalisation. Finally, the last chapter, “[Multi-hazard Detection by Integrating Social Media and Physical Sensors](#)”, describes a tool called LITMUS. It combines social media data with data from multiple physical sensors to handle the inherent varied origins and composition of multi-hazards. The results demonstrate that LITMUS detects more landslides than the ones reported by an authoritative source.

Acknowledgement

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Prior technical sources are acknowledged through citations at the appropriate places in each chapter of the book. In case of any errors, we would like to receive feedback so that it could be corrected in the next edition.

We sincerely hope that this book will serve as a valuable source to government agencies who would like to use social media. In addition, we also hope that it will be a valuable reference text for undergraduate and graduate studies, and researchers in this area.

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