The Development of Open Government Data

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The Development of Open Government Data: Connecting Supply and Demand Through Portals

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Abbreviations

AHP	Analytic Hierarchy Process
API	Application programming interface
CR	Consistency ratio
DOI	Diffusion of Innovation theory
FAQ	Frequently asked question
GDP	Gross domestic product
HCI	Human–computer interaction
ICL	Intention – complexity
ICP	Intention – compatibility
ICT	Information and communication technology
IOB	Intention – observability
IRA	Intention – relative advantage
ITR	Intention – trialability
MM	Motivational model
OGD	Open government data
PBC	Perceived behavioral control
PEOU	Perceived ease of use
PSI	Public sector information
PU	Perceived usefulness
RQ	Research question
TAM	Technology acceptance model
TIPI	Ten-item personality inventory
TPB	Theory of planned behavior
TRA	Theory of reasoned action
TTS	Text to speech
UTAUT	Unified theory of acceptance and use of technology

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Preface

Open government data (OGD) have developed rapidly in these years due to various benefits that can be derived through transparency and public access. However, researchers emphasize lack of use instead of lack of disclosure as a key problem in OGD's present development. Previous studies look into this issue either from the supply side, focusing on data quantity and quality, or from the demand side, focusing on factors that affect users' acceptance of OGD, but seldom consider both sides at the same time. This book makes a comparison of the supply and demand sides of OGD and explores possible directions for the future development of OGD portals based on the discovered mismatches lying between the two sides.

The core purpose of this book is to improve OGD utilization by balancing the supply side and demand side of OGD according to the demands of citizens through the development of OGD portals. To achieve this objective, four connected studies were designed and carried out. The first study built an evaluation framework for understanding the development of the supply side of OGD by evaluating existing Chinese province-level OGD portals. Sequentially, with citizens as primary users on the demand side and the major beneficiaries of OGD, the second study focused on a survey conducted to analyze citizens' awareness and utilization of OGD portals. A third study compared the supply and demand sides of OGD based on Diffusion of Innovation (DOI) theory, using the data collected in the previous two studies. A final study tested the proposed usability criteria for building an OGD portal in helping users to use the data on the portal by carrying out a between-subjects experiment. All case studies in these four parts were carried out in China.

This research finds that Chinese OGD portals are in an early stage of development. Citizens have limited awareness of OGD and OGD portals. Significant correlations are recognized among citizens, and their demands and utilization of OGD. Mismatches lie between the supply and demand sides of OGD. Following the proposed usability criteria for building an OGD portal could improve citizens' proper utilization of OGD. Future directions for developing OGD are identified.

The key contribution of this book to the present literature is the theoretical and practical understanding of OGD and its user, as well as proposing directions for OGD portals' future development in order to encourage citizens' OGD utilization.

This book originates from the PhD research study of Dr Di Wang in Macquarie University, Australia, under the supervision of Prof. Deborah Richards, Assoc. Prof. Ayse Aysin Bilgin, and Prof. Chuanfu Chen.

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Di Wang
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