Table of Contents

Preface .................................................................................................................................................... xvi

Section I
Emerging Concepts in SISP

Chapter I
Use of Information Technology Investment Management to Manage State Government
Information Technology Investments ........................................................................................................ 1
  David Van Over, University of Wollongong, Dubai

Chapter II
An Information Technology Planning Framework for an Industry Cluster ........................................ 23
  Albert Wee Kwan Tan, National University of Singapore, Singapore

Chapter III
Strategic Market Driven IS/IT Planning Model ..................................................................................... 39
  Teay Shawyun, Assumption University of Thailand, Thailand

Chapter IV
Fuzzy Modelling for Integrated Strategic Planning for Information Systems and Business
Process Design ......................................................................................................................................... 59
  Dimitris K. Kardaras, Athens University of Economics and Business, Greece
  Bill Karakostas, City University, UK

Section II
Information Technology Portfolio Management

Chapter V
IT Portfolio Management: A Holistic Approach to Outsourcing Decisions .................................... 79
  Luke Ho, Staffordshire University, UK
  Anthony S. Atkins, Staffordshire University, UK
Chapter VI
A Scenarios-Based Methodology for IT Portfolio Planning

Stanley Loh, Catholic University of Pelotas and Lutheran University of Brazil, Brazil
Ramiro Saldaña, Catholic University of Pelotas, Brazil
Leo Faller Becker, Catholic University of Pelotas, Brazil

Chapter VII
Information Technology Portfolio Management: A Meta-Heuristic Optimization Approach

Vassilis Syrris, Aristotle University of Thessaloniki, Greece

Chapter VIII
Strategic IT Portfolio Management for Development of Innovative Competences

Dejan Petrović, University of Belgrade, Serbia
Marko Mihić, University of Belgrade, Serbia
Biljana Stošić, University of Belgrade, Serbia

Chapter IX
Developing an E-Government Roadmap for Developing Countries

Cuthbert Shepherdson, KDI Asia Pte Ltd, Singapore
Albert Wee Kwan Tan, National University of Singapore, Singapore
Van Nam Tran, National Economics University, Vietnam

Chapter X
Adopting the IT (RPM) Model to Enhance the Value of IT

Anand Sanwal, Brilliont, USA
Subhradeep Mohanty, American Express, USA

Section III
Capability Development

Chapter XI
CEO/CIO Communication and the Strategic Grid Dimensions

Alice M. Johnson, North Carolina A&T State University, USA
Albert L. Lederer, University of Kentucky, USA

Chapter XII
Strategic Capital Capacity and Capability Management of IS/IT

Teay Shawayun, Assumption University of Thailand, Thailand

Chapter XIII
Challenges in Implementing Information Technology Plan

Evon M. O. Abu-Taieh, The Arab Academy for Banking and Financial Sciences, Jordan
Asim A. El Sheikh, The Arab Academy for Banking and Financial Sciences, Jordan
Jeihan M. Abu-Tayeh, Ministry of Planning and International Cooperation, Jordan
Section IV
Enterprise Architecture

Chapter XIV
Optimizing IT Implementation by Using the Enterprise Architecture Approach (EA):
The Case of a Telecommunications Operator ................................................................. 261
Anthony Ioannidis, Athens University of Economics and Business, Greece
Nikolaos Skarpetis, University of the Aegean, Greece

Chapter XV
Strategic Technology Engineering Planning ................................................................. 275
Tony C. Shan, IBM, USA
Winnie W. Hua, CTS Inc., USA

Chapter XVI
Object-Oriented Software Design Patterns Applied to IT Management Theory ............. 296
Eric Tachibana, National University of Singapore, Singapore
David Ross Florey, Merrill Lynch Global Business Technology, Singapore

Section V
Further Readings

Chapter XVII
The Interplay of Strategic Management and Information Technology ............................. 314
Zaiyong Tang, Louisiana Tech University, USA
Bruce Walters, Louisiana Tech University, USA

Chapter XVIII
Information Technology Portfolio Management: Literature Review, Framework,
and Research Issues ...................................................................................................... 327
Ram Kumar, University of North Carolina – Charlotte, USA
Haya Ajjan, University of North Carolina – Charlotte, USA
Yuan Niu, University of North Carolina – Charlotte, USA

Chapter XIX
IT Portfolio Management: Implementing and Maintaining IT Strategic Alignment ........ 352
Brian H. Cameron, The Pennsylvania State University, USA
Chapter XX
IT Portfolio Management: A Pragmatic Approach to Implement IT Governance

Muralidharan Ramakrishnan, Process Symphony, Australia

378

Chapter XXI
Planning and Control and the Use of Information Technology in Mental Healthcare Organizations

I.J. Baars, Maastricht University, The Netherlands
G.G. Van Merode, Board of Maastricht University Medical Center & Maastricht University, The Netherlands

394

Chapter XXII
Examining the Approach Used for Information Technology Investment Decisions by Practitioners Responsible for IT Planning in Namibia

Karna Naidoo, University of KwaZulu-Natal, South Africa

402

Compilation of References

408

About the Contributors

437

Index

444