# Data Management

Issues, Challenges and Opportunities

Mira Kartiwi Akram M. Zeki



**IIUM PRESS** 

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

### DATA MANAGEMENT: ISSUES, CHALLENGES AND OPPORTUNITIES

#### **Editors**

Mira Kartiwi Akram M. Zeki



### DATA MANAGEMENT: ISSUES, CHALLENGES AND OPPORTUNITIES

#### Published by: IIUM Press International Islamic University Malaysia

First Edition, 2011 ©HUM Press, HUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Bibliography p. Includes Index

ISBN

ISBN: 978-967-418-084-3

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM (Malaysian Scholarly Publishing Council)

Printed by:

HUM PRINTING SDN. BHD.

No. 1, Jalan Industri Batu Caves 1/3 Taman Perindustrian Batu Caves Batu Caves Centre Point 68100 Batu Caves Selangor Darul Ehsan

#### TABLE OF CONTENT

. DATA QUALITY ASSESSMENT ON INTERNAL SYSTEM IN XYZ DIVISION OF TELECOMMUNICATION COMPANY: A CASE STUDY IN NDONESIA Muharman and Mira Kartiwi1
I. DATA MANAGEMENT ISSUES: A CASE STUDY OF HUM DIGITAL LIBRARY Alfi Khairiansyah Machfud, Jawdat Ahmad Khatib, Khodashev Aslanbeck and Mira Kartiwi15
B. DATA MANAGEMENT CHALLENGES IN BANKING INDUSTRY: BUSINESS PERSPECTIVE Adebiyi Lookman Ademola and Mira Kartiwi
AND THE SOLUTIONS: RECOMMENDATION AND TOOLS ohara Ghazali and Mira Kartiwi
5. DATA QUALITY MATURITY IN INFORMATION TECHNOLOGY DIVISION (ITD): AN EDUCATION ORGANIZATION Muhammad Rabiul Hasan and Mira Kartiwi43
5. DATA STEWARDSHIP: A CASE STUDY OF CENTRE OF LANGUANGE AND PRE-UNIVERSITY ACADEMIC DEVELOPMENT (CELPAD) smail Mahmoud, Kairo, Johara Ghazali, Rifhan bt. Abdul Ghafir and dira Kartiwi
7. THE CHALLENGES OF DATA MIGRATION CASE STUDY OF JNIVERSITY PUTRA MALAYSIA (UPM) Hanan Abdullah A. Fatani, Ikhlas Fuad Zanzami, Nuha Abdullah H. Zammaral and Mira Kartiwi

16. DATA MANAGEMENT CHALLENGES IN RETAIL INDUSTRY Fauzan Alfariti and Mira Kartiwi151
17. TROPICAL CROPS PLANTING RECOMMENDATION SYSTEM Siti Safura Yasmin Sahibin and Akram M. Zeki157
18. EMPLOYING MACHINE LEARNING ALGORITHMS TO EXTRACT ISLAMIC KNOWLEDGE Kawther A. Aldhlan, Ahmed M. Zeki and Akram M. Zeki161
19. A WEB DATA MANAGEMENT APPLICATION FOR EDUCATION SECTOR: A KICT ONLINE REGISTRATION SYSTEMS FOR FINAL YEAR PROJECT
Muhamet Abdullahu and Mira Kartiwi169 20. LOGISTIC DATABASE SYSTEM Akram M, Zeki and Wan Zarith Nadia bt. Wan Zahari
21. DATA OWNERSHIP CHALLENGES IN DISASTER MANAGEMENT Mira Kartiwi, Rasheed Muhammed and Muna A. Ali185

# 5. DATA QUALITY MATURITY IN INFORMATION TECHNOLOGY DIVISION (ITD): AN EDUCATION ORGANIZATION

Muhammad Rabiul Hasan and Mira Kartiwi

#### **ABSTRACT**

This study explored the data quality maturity at an educational organization. Information technology division (itd) here is the focused sample where the case study has been conducted throughout interviews and open-ended questionnaire. The findings revealed a lot of information surrounding data, data quality, data management and databases, with a 360° views from four top it personnel at itd, iium. From the group members' view, this study has met their initial expectations; and now bears a significant knowledge on data management or specifically data quality management at a broader perspective.

#### 5.1 INTRODUCTION

For organisations to be best served by their information systems, a high degree of data quality is required. Data quality plays an important role as one of the powerful competition advantages for those companies that run businesses in the information society (Drucker, 1985). Organisations rely on this data to make significant decisions that can affect customer attention, supply chain efficiency and regulatory compliance. Poor quality data brings several negative effects to business users through the loss of customer satisfaction, high running costs, inefficient decision making processes, and performance (Ryu, Park & Park, 2006). Some of the more astute people in the organization may recognize that data and the information derived from that data translate into real power, and that control of that data can be the