

# CASES IN KNOWLEDGE MANAGEMENT & INFORMATION RETRIEVAL

Editors

Roslina Othman  
Mohamad Fauzan Noordin  
Noor Azura Zakaria



IIUM Press  
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

# **CASES IN KNOWLEDGE MANAGEMENT & INFORMATION RETRIEVAL**

---

## **Editors**

Roslina Othman

Mohamad Fauzan Noordin

Noor Azura Zakaria



**IIUM Press**

Published by:  
IIUM Press  
International Islamic University Malaysia

First Edition, 2011  
©IIUM Press, IIUM

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: 978-967-418-050-8

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

Printed by :  
**IIUM 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 CONTENTS

---

Dedication	i
Preface	v
Acknowledgement	vii
Introduction	ix

## *Part I: Cases in Knowledge Management*

<b>Case 1: Knowledge Management Best Practices</b>	1
Noor Azura Zakaria, Rohaimi Abdullah and Mohamad Fauzan Noordin	
<b>Case 2: Organizational Learning</b>	7
Noor Azura Zakaria and Mohamad Fauzan Noordin	
<b>Case 3: Knowledge Portal</b>	13
Noor Azura Zakaria, Mohamad Fauzan Noordin and Roslina Othman	
<b>Case 4: Culture in Community of Practices (CoPs)</b>	19
Noor Azura Zakaria, Mohamad Fauzan Noordin and Rohaimi Abdullah	
<b>Case 5: Knowledge Management Strategic Plan</b>	25
Noor Azura Zakaria, Mohamad Fauzan Noordin and Roslina Othman	
<b>Case 6: Critical Knowledge Sharing</b>	31
Noor Azura Zakaria, Hafizah Reh and Mohamad Fauzan Noordin	
<b>Case 7: Knowledgeable Employees</b>	37
Noor Azura Zakaria, Mohamad Fauzan Noordin and Lambensa Fateema	
<b>Case 8: Lesson Learned</b>	43
Noor Azura Zakaria, Roslina Othman and Mohamad Fauzan Noordin	
<b>Case 9: Extrinsic and Intrinsic Motivations</b>	49
Noor Azura Zakaria and Mohamad Fauzan Noordin	

<b>Case 10: Storytelling</b>	55
Noor Azura Zakaria, Roslina Othman and Mohamad Fauzan Noordin	
<b><i>Part II: Cases in Information Retrieval</i></b>	
<b>Case 11: Social Network</b>	61
Roslina Othman	
<b>Case 12: Micro Blogs</b>	67
Roslina Othman and Noor Azura Zakaria	
<b>Case 13: Content Communities</b>	73
Roslina Othman	
<b>Case 14: Digital Library</b>	79
Roslina Othman and Nur Leyni Nilam Putri Junurham	
<b>Case 15: Search Engine</b>	85
Roslina Othman and Mohamad Fauzan Noordin	
<b>Case 16: Search Engine Optimization</b>	91
Roslina Othman	
<b>Case 17: Patent Search</b>	97
Roslina Othman and Noorfatin Muhamad Sharhabil	
<b>Case 18: Visual Search</b>	103
Roslina Othman and Mohd Khairul Nizam Abdul Latif	
<b>Case 19: Quranic Search</b>	109
Roslina Othman and Mohamad Fauzan Noordin	
<b>Case 20: Wisdom-based Search System</b>	115
Roslina Othman	

# CASE 15: SEARCH ENGINE

---

Roslina Othman and Mohamad Fauzan Noordin

## Abstract

This chapter explores on the features of search engine. Google has been the most popular search engine due to its powerful search ability and linkages with blogs and forum posts. Recently Google introduced Caffeine indexing system a way to offer fresher search results in an instant. The indexing features of Caffeine include indexing items as obtained from the crawling, aiming for novelty search, and focuses on small portion instead of the entire web index. However, the search results are still ranked by PageRank criteria. Caffeine posed challenges to search engine optimization.

## 15.1 Google

Today, we're announcing the completion of a new web indexing system called Caffeine. Caffeine provides 50 percent fresher results for web searches than our last index, and it's the largest collection of web content we've offered. Whether it's a news story, a blog or a forum post, you can now find links to relevant content much sooner after it is published than was possible ever before.

Some background for those of you who don't build search engines for a living like us: when you search Google, you're not searching the live web. Instead you're searching Google's index of the web which, like the list in the back of a book, helps you pinpoint exactly the information you need.

So why did we build a new search indexing system? Content on the web is blossoming. It's growing not just in size and numbers but with the advent of video, images, news and real-time updates, the average webpage are richer and more complex. In addition, people's expectations for search are higher than they used to be. Searchers want to find the latest relevant content and publishers expect to be found the instant they publish.