

# Knowledge Management (KM) Processes in Organizations

Theoretical Foundations and Practice

© Springer Nature Switzerland AG 2022

Reprint of original edition © Morgan & Claypool 2011

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, photocopy, recording, or any other except for brief quotations in printed reviews, without the prior permission of the publisher.

Knowledge Management (KM) Processes in Organizations: Theoretical Foundations and Practice

Claire R. McInerney and Michael E. D. Koenig

ISBN: 978-3-031-01147-4      paperback

ISBN: 978-3-031-02275-3      ebook

DOI 10.1007/978-3-031-02275-3

A Publication in the Springer series

*SYNTHESIS LECTURES ON INFORMATION CONCEPTS, RETRIEVAL, AND SERVICES*

Lecture #18

Series Editor: Gary Marchionini, *University of North Carolina, Chapel Hill*

Series ISSN

Synthesis Lectures on Information Concepts, Retrieval, and Services

Print 1947-945X    Electronic 1947-9468

# Synthesis Lectures on Information Concepts, Retrieval, and Services

## Editor

**Gary Marchionini**, *University of North Carolina, Chapel Hill*

Synthesis Lectures on Information Concepts, Retrieval, and Services publishes 50- to 100-page publications on topics pertaining to information science and applications of technology to information discovery, production, distribution, and management. For more information, visit [www.morganclaypool.com/r/icr](http://www.morganclaypool.com/r/icr).

## Knowledge Management (KM) Processes in Organizations: Theoretical Foundations and Practice

Claire R. McInerney and Michael E. D. Koenig  
2011

## Search-Based Applications: At the Confluence of Search and Database Technologies

Gregory Grefenstette and Laura Wilber  
2010

## Information Concepts: From Books to Cyberspace Identities

Gary Marchionini  
2010

## Estimating the Query Difficulty for Information Retrieval

David Carmel and Elad Yom-Tov  
2010

## iRODS Primer: Integrated Rule-Oriented Data System

Arcot Rajasekar, Reagan Moore, Chien-Yi Hou, Christopher A. Lee, Richard Marciano, Antoine de Torcy, Michael Wan, Wayne Schroeder, Sheau-Yen Chen, Lucas Gilbert, Paul Tooby, and Bing Zhu  
2010

## Collaborative Web Search: Who, What, Where, When, and Why

Meredith Ringel Morris and Jaime Teevan  
2009

### Multimedia Information Retrieval

Stefan Rüger  
2009

### Online Multiplayer Games

William Sims Bainbridge  
2009

### Information Architecture: The Design and Integration of Information Spaces

Wei Ding and Xia Lin  
2009

### Reading and Writing the Electronic Book

Catherine C. Marshall  
2009

### Hypermedia Genes: An Evolutionary Perspective on Concepts, Models, and Architectures

Nuno M. Guimarães and Luís M. Carrico  
2009

### Understanding User-Web Interactions via Web Analytics

Bernard J. (Jim) Jansen  
2009

### XML Retrieval

Mounia Lalmas  
2009

### Faceted Search

Daniel Tunkelang  
2009

### Introduction to Webometrics: Quantitative Web Research for the Social Sciences

Michael Thelwall  
2009

### Exploratory Search: Beyond the Query-Response Paradigm

Ryen W. White and Resa A. Roth  
2009

### New Concepts in Digital Reference

R. David Lankes  
2009

### Automated Metadata in Multimedia Information Systems: Creation, Refinement, Use in Surrogates, and Evaluation

Michael G. Christel  
2009

# Knowledge Management (KM) Processes in Organizations

**Theoretical Foundations and Practice**

Claire R. McInerney

Rutgers, The State University of New Jersey

Michael E. D. Koenig

Long Island University, NY

*SYNTHESIS LECTURES ON INFORMATION CONCEPTS, RETRIEVAL, AND  
SERVICES #18*

## ABSTRACT

Knowledge Management (KM) is an effort to increase useful knowledge in the organization. It is a natural outgrowth of late twentieth century movements to make organizational management and operations more effective, of higher quality, and more responsive to constituents in a rapidly changing global environment. This document traces the evolution of KM in organizations, summarizing the most influential research and literature in the field. It also presents an overview of selected common and current practices in knowledge management, including the relationship between knowledge management and decision making, with the intention of making a case for KM as a series of processes and not necessarily a manipulation of things. The final section highlights the use of social networking and commonly adopted Web applications to increase the value of social capital and to connect practitioners with clients and colleagues.

## KEYWORDS

knowledge management, information management, knowledge sharing, content management, CMS, Content Management Systems, communities of practice, corporate Intelligence, organizational intelligence, organizational learning, or the learning organization

# Contents

	<b>Acknowledgments</b> .....	<b>xi</b>
<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	What is KM? .....	1
1.2	The History and Development of KM .....	2
1.3	The Stages of KM Development .....	5
1.4	Supplementary Ways of Looking at KM .....	9
1.4.1	The IBM Two by Two Matrix .....	9
1.4.2	The Forest and the Trees .....	10
1.4.3	KM as the Extension of the Successful R&D Environment .....	12
<b>2</b>	<b>Background Bibliographic Analysis</b> .....	<b>15</b>
<b>3</b>	<b>Theorizing Knowledge in Organizations</b> .....	<b>19</b>
3.1	Knowledge as Resource and Process .....	19
3.2	Interactions for Knowledge Creation .....	20
3.3	Activity as Context .....	20
<b>4</b>	<b>Conceptualizing Knowledge Emergence</b> .....	<b>23</b>
4.1	Gatekeepers, Information, Stars, and Boundary Spanners .....	23
4.2	Research Productivity and Knowledge .....	25
4.3	Lack of Recognition of These Findings in the Business Community .....	26
4.4	Community-Based Models .....	27
4.5	Repository Model .....	29
4.6	Activity-Based Models .....	29
<b>5</b>	<b>Knowledge “Acts”</b> .....	<b>31</b>
5.1	Question Asking and Answering .....	31
5.2	Posting Content to Repositories .....	31
5.3	(Re)using Knowledge .....	32
5.4	Knowledge-Based Decision Making .....	33

<b>6</b>	<b>Knowledge Management in Practice</b>	<b>35</b>
6.1	KM in Practice - Processes	35
6.1.1	Finding Information and Knowledge	35
6.1.2	Sharing Information and Knowledge	36
6.1.3	Development of Knowledge	37
6.2	KM in Practice - Procedures and Practices	37
6.2.1	Knowledge Audit	37
6.2.2	Tags, Taxonomies, and Content Management	39
6.2.3	Lessons Learned Databases	40
6.2.4	Expertise Location	42
6.2.5	Communities of Practice (CoPs)	43
6.3	Processes, Procedures, and Practices Matrix	43
<b>7</b>	<b>Knowledge Management Issues</b>	<b>45</b>
7.1	Explicit & Tacit; but Better: Explicit, Implicit, & Tacit	45
7.2	Training and User Education in KM	46
7.2.1	User Training and Education versus Management Support for KM	48
7.3	Trust in KM	48
7.4	Information Security versus Information Sharing	49
7.5	KM and Competitive Intelligence	50
7.6	KM Motivation (Creating Motivation for KM)	51
7.7	KM Metrification	52
7.8	Justifying KM	52
7.8.1	Success	54
7.9	Post Retirement Knowledge Retention	54
<b>8</b>	<b>Knowledge Management and Decision Making</b>	<b>57</b>
<b>9</b>	<b>Social Network Analysis and KM</b>	<b>59</b>
9.1	Social Network Analysis	59
<b>10</b>	<b>Implications for the Future</b>	<b>63</b>
<b>11</b>	<b>Conclusion</b>	<b>65</b>
<b>A</b>	<b>KM Websites</b>	<b>67</b>

**Bibliography** ..... 69

**Authors' Biographies** ..... 83

# Acknowledgments

The authors gratefully acknowledge the contributions made to this work by William Voon, who gave valuable assistance with the research, and Scott Young without whose very able assistance the construction of this book would have been far more onerous.

Claire R. McInerney and Michael E. D. Koenig  
December 2010