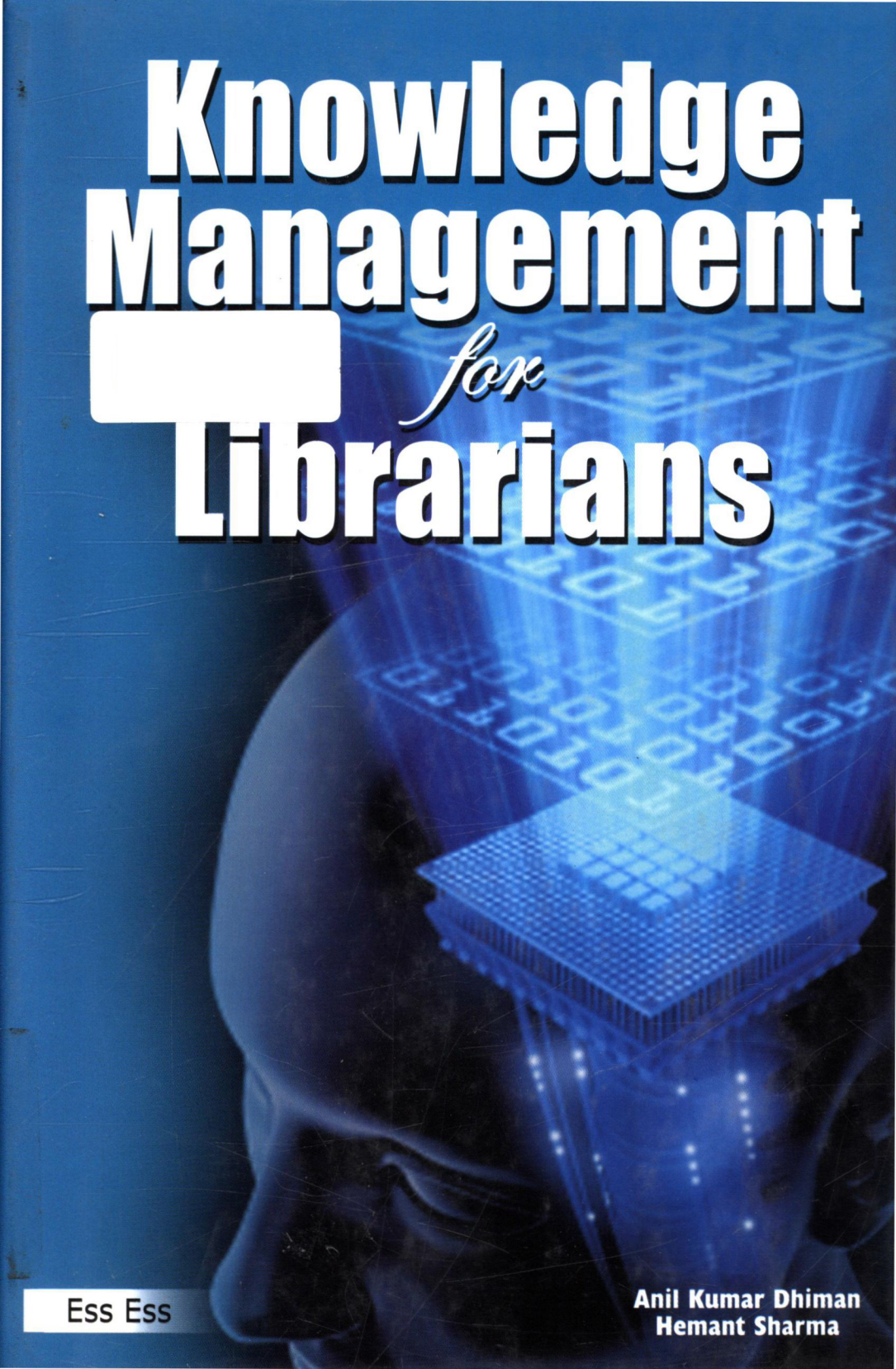
Knowledge Management for Librarians



Anil Kumar Dhiman
Hemant Sharma

Ess Ess

Forthcoming

ALA Editions

Human Resources for Results
The Right Person for the Right Job
Jeanne Goodrich and Paula M. Singer

Blueprint for your Library Marketing Plan
A Guide to help you Survive & Thrive
Patricia H. Fisher and Marseille M. Pride

Preservation & Conservation of Library & Archives
Nelly Balloffet and Jenny Hille

Collaborative Collection Development
A Practical Guide for Your Library
James Burgett / John Haar / Linda L. Phillips

Going Live
Starting & Running a Virtual Reference Service
Steve Coffman

High Tech High Touch
Library Customer Service Technology
Laynn Jurewice and Todd Cutler

The Library's Legal Answer Book
Mary Minow / Tomas A. Lipinski

Assessing Service Quality
Satisfying the Expectations of Library Customers
Peter Hernon / Ellen Altman

Creating Database-Backed Library Web Pages
Using Open Source Tool
Stephen R. Westman

Checklist of Library Building Design Considerations
William W. Sannwald

Creating the Customer-Driven Library
Building on the Bookstore Model
Jeannette Woodward

Intellectual Freedom Manual
Office for Intellectual Freedom

Small Change Big Problems
Detecting & Preventing Financial Misconduct in Your Library
Herbert Snyder

Metadata in Practice
Diane L. Hillmann Elaine L. Westbrooks

Maxwell's Guide to Authority Work
Robert L. Maxwell

Measuring your Library's Value
How to Do a Cost-Benefit Analysis for Your Public Library
Donald S. Elliott Glen E. Holt
Sterling W. Hayden & Leslie Edmonds Holt

Ess Ess Publications
4837/24, Ansari Road
Darya Ganj
New Delhi-110 002
Phones: 41563444, 23260807
Fax: 011-41563334
E-mail: info@essessreference.com
www.essessreference.com

ISBN: 978-81-7000-575-9
9 788170 005759
Rs.1675/-

Knowledge Management *for* Librarians

Anil Kumar Dh
Hemant Shar

KNOWLEDGE MANAGEMENT
FOR
LIBRARIANS

Anil Kumar Dhiman
Information Scientist
Gurukul Kangri University
Haridwar
&
Hemant Sharma
Reader & Head
School of Studies in Library Science
Jiwaji University
Gwalior

Ess Ess Publications
New Delhi

Ess Ess Publications
4837/24, Ansari Road,
Darya Ganj,
New Delhi-110 002.

Tel.: 23260807, 41563444
Fax: 41563334
E-mail: info@essessreference.com
www.essessreference.com

Rs.1675/-

First Published - 2009

ISBN: 978-81-7000-575-9

Published By Ess Ess Publications and printed at Salasar Imaging Systems

PRINTED IN INDIA

KNOWLEDGE MANAGEMENT FOR LIBRARIANS

Preface

Knowledge Management is emerging as a new concept in the management field. Though the concept is for business organizations but it is also attracting Library Professionals to participate and make use of it in managing library and information centres. This book on *Knowledge Management for Librarians* is written to make aware the working librarians about knowledge management and its possible uses in the library and information centres.

The book is divided into 12 chapters. First chapter is Introduction about knowledge and knowledge management. Next chapter describes origin of the Knowledge Management and its Developmental History. Knowledge creation and its dissemination are two very important tasks or the activities of knowledge management. Next two chapters discuss the ways and means of creation of knowledge, its capturing and codification. Once the knowledge is created and codified, its dissemination is important. Unless the knowledge is not disseminated, it is of no use, so its transfer and sharing with others is important. Next chapter discusses and describes knowledge transfer and its sharing for various purposes. Tools used for Knowledge Management are described in next chapter. Artificial Intelligence and networks plays important roles in knowledge management. Neural Networks and Value Networks are discussed in next chapter.

Data Mining and Web Mining are important steps to find out knowledge from the universe of knowledge. Both play a crucial role in managing knowledge. Various ways of mining data in traditional mode and web environment and models with their impact on the society have been discussed in next chapter. For successful implementation of any programme, an effective leadership is very essential and so is the case with knowledge management. Next

chapter describes leadership role and implementation of knowledge management. It also gives a general idea about formulation of strategies and road map for implementation of Knowledge Management. Knowledge management is emerging as an effective way of managing knowledge in the era of information and communication technologies, but on the other hand it is also posing some of the social and legal issues in front of knowledge managers. A chapter on Ethical and Legal Issues in Knowledge Management is retained in the book describing some of the important aspects of social, ethical and legal issues for knowledge management. As the book is written primarily for the librarians and working professionals, next chapter on Knowledge Management in Libraries, describes the role of knowledge management in libraries, typology of knowledge management in libraries and possible uses of knowledge management in academic, public and special libraries. Some of the barriers for migrating librarians into knowledge managers are also discussed along with state of art of knowledge management in the libraries in this chapter. The last chapter of the book *Epilogue* is devoted to the latest development in the field of Knowledge Management, where its prospects are also described in brief.

The book is appended with two appendices on *Alternative Schemes for Structuring Knowledge Management System and Software Tools for Knowledge Management.*

The book is written primarily for the working librarians and library professionals so that they could adopt this management technique in the library and information centres, but it is believed that this book will also be equally useful for those who are interested to know the mystery of knowledge management in the field of library science. The students and the teachers will also be benefited with this book to enhance their knowledge in the emerging field of Knowledge Management.

In preparing this book, the help of various sources and books have been taken. We would like to thank all the authorities whose works have been consulted during the preparation of this book. *Dr. Dhiman* is indebted to his parents *Shri Ramlal Dhiman* and *Smt. Kamla Devi* for their blessings and moral encouragement. He is also

thankful to his son *Aman*, to whom like during his other works, he could not pay much attention, which he deserved while writing this book. He is also thankful to his wife *Smt. Yashoda Rani*, the co-authoress of many books with him in library science, who has always been a source of inspiration to enable him to complete this work. *Dr. Sharma* is thankful to his family members, especially to his wife *Smt. Ranjana Sharma* who made him free from every type of home responsibilities while working on the manuscript of this book.

Last but not the least, our thanks are also due to the *Shri Sumit Sethi*, the owner of Ess Ess Publications, New Delhi, for beautiful, nice and timely publication of the book within a short span of time.

June 2009 **Authors**

Contents

1

INTRODUCTION

Knowledge management might be "hot" as of today, but successful managers have always realized its value. Long before terms such as *expert systems, core competencies, best practices, learning organization and corporate memory* were in vogue, these managers knew that their company's key asset was not its buildings, its market share, or its products, but it lay in its people, their knowledge, and skills. After having tried everything else — from the greatest products and the best technology to virtual monopolies — in their respective markets, more businesses have finally come to the realization that the only sustainable source of competitive advantage is their knowledge.

Knowledge and knowledge management are lofty concepts — debated by academics and managers and even doubted by some analysis — one that only a few businesses have mastered. Knowledge is fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms.

The Knowledge management can be extended to

"management of organizational knowledge for creating business value and generating a competitive advantage." Knowledge management enables the creation, communication and application of knowledge of all kinds to achieve business goals. Kirk Klasson elucidates, "Knowledge management is the ability to create and retain greater value from core business competencies." Knowledge management addresses business problems particular to your business — whether it is creating and delivering innovative products or services; managing and enhancing relationships with existing and new customers, partners and suppliers or administering and improving work practices and processes.

Knowledge management is a framework within which the organization views its processes as knowledge processes. In this view, all business processes involve creation, dissmination, renewal and application of knowledge toward organizational sustenance and survival.

The term of yester years was Information Management. This term came about when people realized that information is a resource that can and needs to be managed to be useful in an organization. When Ranganathan wrote that 'the Universe of subjects is synonymous to Universe of Knowledge, he became the first to identify knowledge management in libraries. Though claims may be there, from various other quarters of contributors, for the introduction of the term in library management, there cannot be any doubt about Ranaganathan's originality of the claim. From this, the ideas of Information Analysis and Information Planning came about. Organizations are now starting to look at Knowledge as a resource as well. This requires ways for managing the knowledge in libraries of organizations.

Information and Management (IM) and Knowledge Management (KM) – both concepts refer to managing (handling, directing, governing, controlling, coordinating, planning, organizing) processes and the products of those processes. In addition, since knowledge is a form of information, it follows that KM is a form of IM. More specifically, KM is a more robust form of IM that provides managment of activities not necessary in specifying the concept of information management.

One difference between basic IM and KM is that basic IM focuses on managing how information is produced and integrated into the enterprise, while KM does the same with respect to knowledge. A second difference between basic IM and KM is that basic IM focuses on managing a more narrrow set of activities than KM. The two information processes managed by an organization are information production and information integration. The two basic knowledge processes are knowledge production and knowledge integration.

Knowledge production includes (a) knowledge claim formulation, (b) individual and group learning, and (c) information acquisition and (d) knowledge claim evaluation activity. Knowledge integration includes (a) knowledge broadcasting, (b) searching/ retrieving), (c) teaching, and (d) knowledge sharing. The two knowledge processes, once again may be viewed as part of the KLC, a knowledge "value network". The knowledge life cycle or KLC and the interaction of the two knowledge processes are illustrated in Figure 1.1. The major task clusters within knowledge production and knowledge integration are also illustrated in Figure 1.1.

Basic information processes are different from knowledge production and integration processes in that they lack knowledge claim evaluation and therefore fail to distinguish between knowledge claims that are surviving, falsified, or otherwise. Information Prodcution includes information acquisition, individual and group learning, even knowledge claim formulation, but excludes knowledge claim evaluation. So the information "life cycle" or value network is incomplete in comparison with the knowledge life cycle. Similarly, information integration includes broadcasting, searching/retrieving, teaching and sharing but what is being broadcasted, searched for, retrieved, taught and shared is information rather than knowledge.

IM activities can be defined in analogy to KM activities. There are three categories of IM activities in the information management process: interpersonal behaviour; information processing behaviour; and decision making.

- Interpersonal IM behaviour includes:
- figurehead

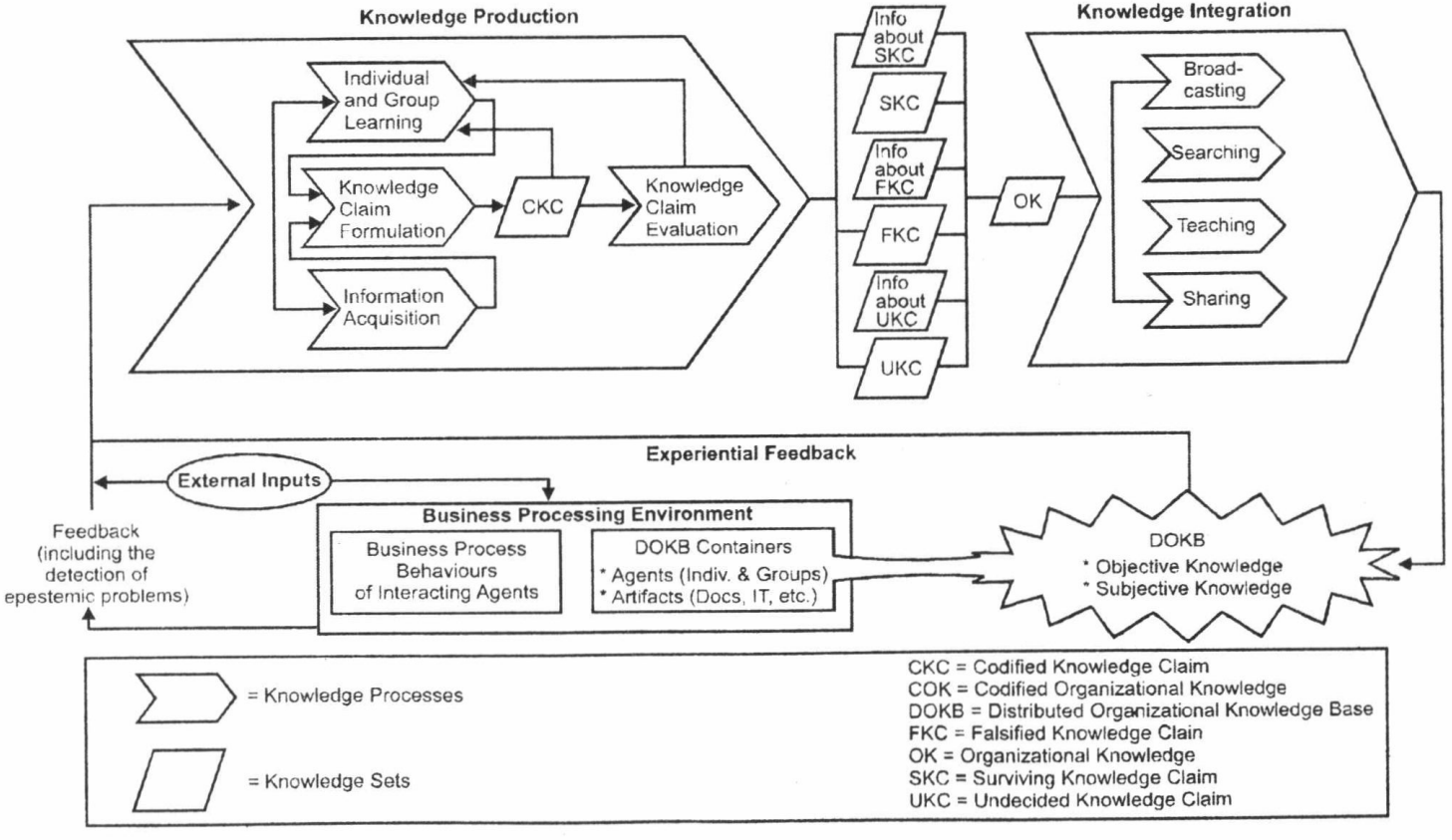


Fig. 1.1. Knowledge Life Cycle

- leadership
- external relationship-building activity

Information processing behaviour includes:

- IM information production (no knowledge claim evaluation)
- IM information integration (only broadcasting, searching/ retrieving, teaching or sharing information, but not knowledge)

Decision making includes:

- changing information processing rules
- crists handling
- allocating IM resources
- negotiating agreements with representatives of other business process

The difference between information processes at the IM level and knowledge processes at the KM level therefore arise from the absence of knowledge claim evaluation activity in IM. As a result, broadcasting, searching/retrieving, teaching and sharing at the IM level are all focused on information and not on knowledge.

Knowledge Management depends upon the resources of a well articulated library. The generation and the application of knowledge management cannot be independent of a library information system.

1.1. KNOWLEDGE FRAMEWORK

Data, Information and Knowledge are three often-encountered words that belong closely together, seem to have slightly different meanings. Sometimes, they are interchangeably used also. Yet, a clarity in their meanings is quite essential to understand the gamut of knowledge management.

Data is the plural form of Datum. Data are the uninterpreated signals that reach the human senses every minute by zillions. Computers are full of data– signals consisting of strings of numbers, characters, and other symbols that are blindly and mechanically handled in large quantities.

Information is data equipped with meaning. Processed data are called information. Data are the input for information processing.

While information provides an understanding of the relations between data, it generally does not provide a foundation for what, why and how of the data. Information has a tendency to be relatively static in time and linear in nature. Information is a relationship between data and, quite simply, is what it is, with great dependence on context for its meaning and with little implication for the future.

Knowledge is derived from information but it is richer and more meaningful than information. It includes familiarity, awareness and understanding gained through experience or study, and results from making comparisons, indentifying consequences, and making connections.

Traditionally, knowledge has been all the core of philosophical considerations. Philosophy has striven for a common and accepted definition or conceptualization of knowledge for centuries with great philosophers contributing to the subject. Here is presented a brief and far from comprehensive survey of definitions offered by writers and researchers in knowledge management.

Knowledge is :

- "Justified true belief": This is the venerable definition of many philosophers, especially of empiricists who believe knowledge claims can be justified by facts. It also is the definition adopted by Nonaka and Takeuchi.
- "Information in context": This is a definition that may have its roots in Cartesian rationalist epistemology. In that conceptual framework, its import is that a knowledge claim is valid if it fits without contradiction and adds to the systematic coherence of a larger framework of knowledge. That is, the rationalist view that knowledge is information in context and that context is what makes it knowledge derives from the more complete idea that information is justified as knowledge when it is coherent with a larger deductive system within which it fits. In this formulation, the validity criterion and the theory of truth are the same. They form a coherence theory of truth and validation, where coherence means that a knowledge claim is consistent with its broader context. In