THE STRATEGIC KNOWLEDGE MANAGEMENT HANDBOOK

Driving Business Results by Making Tacit Knowledge Explicit

Arun Hariharan

Foreword by Peter A.C. Smith

The Strategic Knowledge Management Handbook

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Driving Business Results by Making Tacit Knowledge Explicit

Arun Hariharan
(Foreword by Peter A.C. Smith)

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Dedication

This book is dedicated to my parents Lakshmi and N.A. Hariharan,
my wife Bhuvana, and our children Srihari and Lakshmi.

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Foreword

Arun Hariharan, the author of this book, maintains that it has been written principally for CEOs and senior management to help them understand how they can *actually implement* a strategic knowledge management (KM) program in their business and derive *real demonstrable* business results from such programs that will help them achieve their business objectives. Hariharan believes that manufacturing, service, education, not-for-profit, government, and other types of organizations will benefit from the book. The challenge is to provide practical insights across a broad range of organizations that senior executives will actually appreciate and put into practice—a tall order indeed! Nonetheless, Hariharan demonstrates that he has the breadth of experience, and the practical know-how, to reach these goals admirably.

One of the ways Hariharan achieves these objectives is by using illustrative stories of how KM has been leveraged to achieve strategic business objectives in various organizations, and by providing practical tools such as the 360-degree knowledge management model and examples of its use. Hariharan emphasizes the significance of ideas and innovation as critical components of a successful KM initiative. In particular, this author familiarizes the reader with the very important topic of how to create a culture of knowledge sharing and how to motivate employees toward *knowledge performance.* Hariharan examines typical challenges that executives and their organizations must successfully overcome to implement KM, and via case studies he highlights the seven enablers of KM (the critical success factors) that are essential to achieving significant business results. Finally, he describes his ‘call to action’ to get the reader’s company started on its KM journey, including a step-by-step roadmap to implement everything that is written in his book.

This practical book will help CEOs and senior management understand how they can implement a strategic KM program in their business and derive real demonstrable business results.

Peter A.C. Smith

Peter A.C. Smith is the Publisher and Managing Editor of the Journal of Knowledge Management Practice *(world KM ranking #7). He is President and CEO, The Leadership Alliance Inc. and Director of Strategy, Center for Dynamic Leadership Models in Global Business. He is the co-author of the book* Dynamic Leadership Models for Global Business: Enhancing Digitally Connected Environments.

Preface

Organizational knowledge is your strategic asset.
Wake up and profit from it.

When I visited one of the world's most advanced car manufacturing plants at Toyota City, Japan, one of the many things about their car manufacturing process that struck me as remarkable was the fact that from start to finish, from molding the steel sheet into the car body to fitting various parts, almost all the work was done by machines and robots. This is, of course, true of nearly every car manufacturer today.

Take another story. When I opened my first bank account nearly thirty years ago, I had to fill out an application form, attach some documents, and submit it to the bank. The bank employee did a whole lot of work, all on paper (this bank had no computers in those days). Some days later (weeks, if I remember right), I had my bank account. Recently, my daughter Lakshmi needed a new bank account. Today most of the work in the account-opening process, once done manually, is done by computers. Lakshmi had her new bank account almost instantly.

In both examples above, work that used to be done manually by people has been 'taught' to machines. In other words, the knowledge that was inside people's heads has been transferred to the machines.

Some time ago, I worked with a large global consulting firm that had more than 70,000 people and operated in more than 140 countries. I was part of a team of consultants assigned to a large petrochemicals company. Between the four of us, we had a fair amount of knowledge and experience in the kind of work we needed to do for this client. However, there were occasions when the team found that we did not have the knowledge required for a specific component of the project. This was never a problem, because we had online access to the firm's global 'knowledge base,' which stores documented knowledge, case studies, and project files from all work done by the firm worldwide. In almost every such situation, we were able to find documented knowledge relating to a similar project done by other consultants in the firm for another client, which we were able to quickly learn and use in our project.

On rare occasions, we would be confronted by a particularly difficult problem or one requiring highly specialized knowledge and experience held by only a few experts in the firm. In such cases, we would turn to the firm's global knowledge base, not for documented knowledge but to find out *who* and *where* in the world these experts were. In a matter of minutes or a few hours (allowing for time zones across 140 countries), we would have access to an expert who could advise us and our client.

In all three examples above, it was the knowledge in people's heads that was captured and deployed by the organization. In other words, they have converted individual knowledge into 'organizational knowledge.' If you think about it, you will notice that there are three ways in which this organizational knowledge is deployed:

1. The most obvious and foolproof way of converting individual knowledge into organizational knowledge and deploying it is to 'teach' it to machines (as in the example of the car manufacturer and the bank).
2. For work done by people and not machines, knowledge from past experience (of the firm, or even from outside) becomes permanent organizational knowledge that can be reused by its people when they need it—if it's properly documented and stored with easy search-and-retrieval capability. This type of knowledge (that can be documented) is called *explicit knowledge* by knowledge management (KM) experts.
3. Obviously, not all knowledge can be documented. Some knowledge will always flow from an expert's intuition and much of that comes from years of experience in the field. KM experts call this *tacit knowledge.* In large multi-location organizations such as the global consulting firm that I talked about, knowing *who* or *where* the expert is for the particular type of knowledge you need, and being able to find them quickly, can be a challenge. KM quickly identifies and facilitates access to the expert(s).

The car manufacturer continues to make cars, and the bank continues to add new customer accounts. These processes continue to work even when individual employees who knew these jobs leave the organization. This is because the organization has *internalized* the knowledge by teaching a good part of it to machines. Advances in technology make it possible to teach most repetitive jobs and increasingly complex jobs to machines.

The consulting firm, too, has internalized individual knowledge to the maximum extent possible. However, unlike fitting seats to a car or opening a new bank account, in this case the work is not a repetitive task. No two consulting assignments are exactly alike, and a certain amount of intelligence must be applied at the time the final 'product' is delivered to the client. Such jobs cannot be completely taught to machines. However, our experience in the consulting firm was that a considerable amount of 'reinvention of the wheel' was avoided and significant time and cost were saved—for the firm as well as for clients—by the firm's practice of systematically documenting and making relevant knowledge available where required.

The companies in these examples are *doing* knowledge management (KM) in one form or another. Does this mean that KM is a replacement for people and their skills? In my experience, no. What KM does is to make it possible to teach repetitive tasks to machines, and prevent or minimize the amount of relevant knowledge that walks out when individuals leave the firm. As we saw in the consulting firm, KM cannot be a complete replacement for people's skills, experience, expertise, and intuition. However, KM *can* help the firm and individuals to deploy available knowledge more effectively and efficiently.

Moreover, most new knowledge evolves from existing knowledge. For example, the horse-cart could be invented *because* knowledge about the wheel already existed, and the automobile could be invented *because* the horse-cart already existed.

However, new knowledge usually does not evolve on its own. This requires people. If the existing knowledge is available in an *organized* fashion (as in the example of the consulting firm, or most scientific knowledge), it can facilitate evolution of new knowledge. Thus, in the domain of innovation and inventions, KM cannot replace people, but can be a useful enabler or aid.

See Figure 1 for types of knowledge and Figure 2 for the role of knowledge management in each type of knowledge relevant to your business.

The primary purpose of this book is to enable you to *implement* a strategic KM program in your business and derive business results from it. The contents of this book are relevant to any business—manufacturing or service, and also in education, not-for-profit, government, and other types of organizations.

This book is written for business leaders and executives. It is particularly addressed to CEOs and senior management to help them understand how they can use KM as a strategic tool to achieve their business objectives. For KM professionals, the objective of this book is to help them to *implement* KM with real business results.

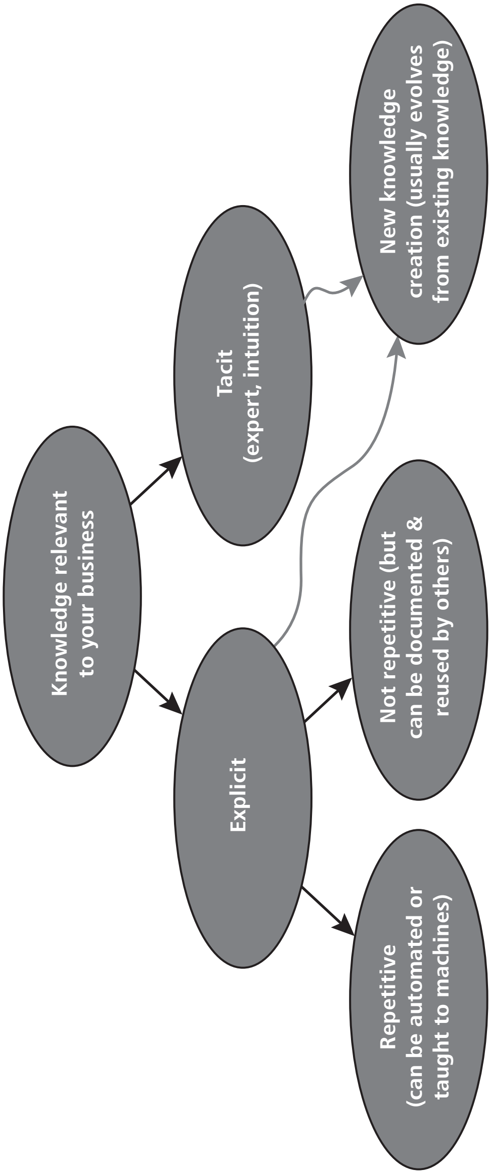

Knowledge relevant to your business
Tacit (expert, intuition)
Explicit
New knowledge creation (usually evolves from existing knowledge)
Not repetitive (but can be documented & reused by others)
Repetitive (can be automated or taught to machines)

Figure 1 Types of knowledge.

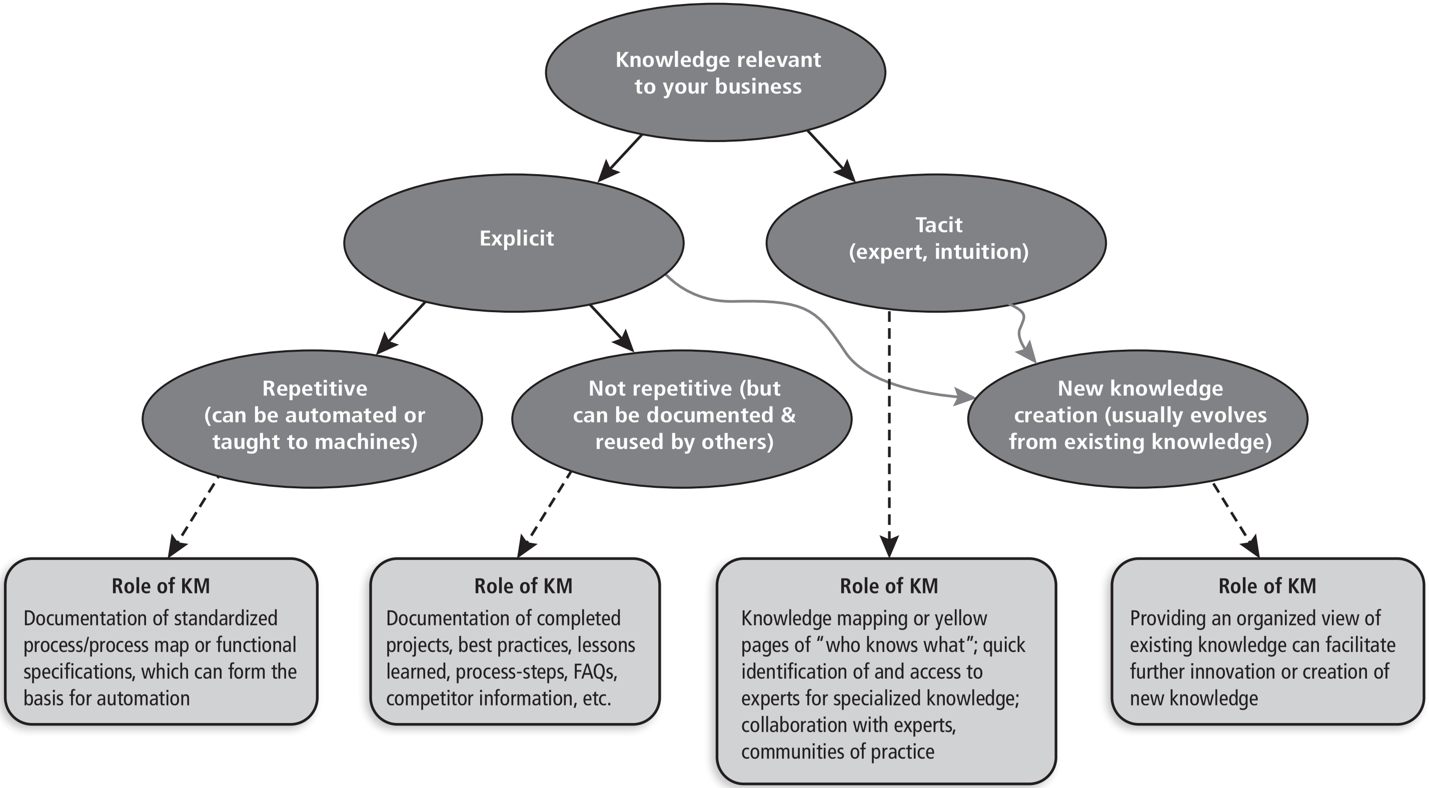

Knowledge relevant to your business
Explicit
Tacit (expert, intuition)
Repetitive (can be automated or taught to machines)
Not repetitive (but can be documented & reused by others)
New knowledge creation (usually evolves from existing knowledge)
Role of KM
Documentation of standardized process/process map or functional specifications, which can form the basis for automation
Role of KM
Documentation of completed projects, best practices, lessons learned, process-steps, FAQs, competitor information, etc.
Role of KM
Knowledge mapping or yellow pages of "who knows what"; quick identification of and access to experts for specialized knowledge; collaboration with experts, communities of practice
Role of KM
Providing an organized view of existing knowledge can facilitate further innovation or creation of new knowledge

Figure 2 The role of knowledge management in each type of knowledge.

We will start by looking at an interesting non-business story of a bunch of friends called the *Fitness Freaks*. Reading this enjoyable story will give you a good idea about what KM is and what it can do for your business, and how. We will then go on to see how some companies have successfully made KM an enabler of their strategic business objectives, rather than an esoteric intellectual concept. We will look at how to create a strategic knowledge map for your business that flows from your strategic business objectives. We will then see what it takes to make KM work in your organization, how KM enables you to achieve real business benefits, and how to measure the results. Next, we will talk about how to motivate your employees toward *knowledge performance,* and how to create a culture of knowledge sharing and replication. After this, we will look at how you can put simple but effective processes in place to capture as well as apply knowledge that is relevant to your business.

Next we will see the 360-degree knowledge management model, and examples of companies that have implemented this model. This is followed by a discussion of the role of ideas and innovation as important components of KM.

The chapter on the 360-degree knowledge management model and the chapter on ideas appeared in my earlier book, *Continuous Permanent Improvement* (Hariharan, ASQ Quality Press 2014). The context in that book was that KM and innovation are important components of business excellence. I felt that my book on KM would be incomplete if I didn't talk about the 360-degree KM model and about ideas. Hence these two chapters are also included in this book.

We will then take a look at typical challenges and how to overcome them in order for KM to give you significant business results—in other words, the critical success factors for KM. After this, we will look at seven enablers of KM through the case example of a large company. Next, we will look at how to build a great KM portal, and suggested functional specifications for your KM portal. The next two chapters talk about how you can synergize your KM program with the balanced scorecard and with your quality program. This is followed by two chapters that share tips for CKOs and CEOs, respectively, on how to achieve maximum business results from KM.

The final chapter is a call to action that will help you get your company started on its KM journey. It provides a step-by-step roadmap to implement everything that is written in this book.

Now a word about what this book is *not* about. The book is primarily intended to help businesses (or other organizations) *implement* a strategic KM program that contributes to achieving strategic business objectives. It is not a book on knowledge or information theory from an academic standpoint, although it does touch briefly upon the interesting and much-written-about distinctions between data, information, knowledge, and wisdom (DIKW). The purpose of this book is to help businesses derive real results through the application of the KM strategies, methods, processes, and lessons learned from the various real examples of KM application in business as described in the book. For the purpose of deriving business results from KM, companies that I worked with did not find it necessary to go into the finer distinctions between data, information, knowledge, and wisdom. For our purpose in this book, we use the term *knowledge* in a broad sense to include any information or knowledge relevant to your business. For academically oriented readers who might be interested in the theory of DIKW, there is plenty of published literature on the subject.

Given the universal or broad scope of the book and because of its strategic and multi-disciplinary audience (including CEOs and senior executives from diverse industries and disciplines), it does not cover highly technical topics such as data mining (finding patterns in large data sets) and predictive analytics (analyzing current and historical facts to make predictions about future events). These techniques can be extremely useful in certain businesses, especially businesses with copious amounts of consumer or transactional data. This book is universal in its relevance across almost any industry and any size of business. In businesses where techniques such as data mining or analytics are useful, these techniques could work as a part of, or in tandem with, the broader KM program. Technical readers who are interested in understanding these techniques in detail will find ample technical manuals and training programs.

While this book talks about various concepts related to KM, everything contained in the book is based on first-hand experience of helping the implementation of these concepts at several companies with significant business results, including some Most Admired Knowledge Enterprise (MAKE) award winners. The book largely tells its story through real examples. This should give readers confidence that they, too, can implement what is written here, and also, I hope, make the reading of the book more interesting.

1

Knowledge Management is Fun

What **we** *know is more than what* **I** *know.*

INTRODUCTION

Imagine that you are a fitness-conscious person. One of your priorities in life is to be fit and maintain good health. Over time, you have acquired a fair knowledge of the common health-related measurements such as blood sugar levels, blood pressure (BP), body mass index, and so forth. Ever since your college days, you have had a small group of friends who share your passion for fitness and are reasonably knowledgeable on health. You call yourselves the *Fitness Freaks.* Everyone in your group maintains regular records showing personal health measurement trends over time. Occasionally, you also compare blood sugar or BP readings with your friends. You keep track of what specific health habits (such as a particular diet or exercise routine) give you benefit. Others in your group do the same.

During your college years, each person in your group had a collection of articles and newspaper clippings on various health tips. Once, you attended a yoga training program that you loved and you received a small book on yoga practices as part of the program.

One day, you came up with a suggestion. Why not pool everyone's articles and other useful material into a common library that could be used by each person in the group? Great idea, say your friends.

After completing college, each of you takes up a different job. A couple of your friends move to other cities. Is your *Fitness Freaks* club going to break up? One friend has an idea. Why not form an *online* health group? This way, your group can continue to interact and share information with each other using technology even if some members move elsewhere. The group agrees that this is a wonderful idea. Soon you and your friends form an online group and create the '*Fitness Freaks* knowledge portal.' The portal has a personal space for each individual, where you can store electronic copies of your own health and medical records. It also has a common area for the group where members can share health tips, knowledge or experiences, and external articles. The common area can be accessed by the whole group. You can also post questions, which can be answered by any of your group members.

After a couple of months, you realize that some of the information that you seek is not available in the form of an article or other documented material (KM experts use the term explicit knowledge to mean documented or document-able knowledge). Not all knowledge can be documented. Some questions require specialized answers from an expert (KM experts call this *tacit knowledge*). You then invite a couple of medical doctor friends to join your online group. So now you have *subject matter experts* in your little online *community*. Now, you can ask questions to the experts.

The experts start posting relevant research, articles, and cases from outside your small group. This is external knowledge that is relevant to your area of interest.

Some months later, one of your friends informs you that he will no longer be able to participate in the online group. Over these months, this individual has contributed considerably to the portal's contents. As a result, a good part of his *individual knowledge* remains even after he leaves the group. In other words, some of his individual knowledge was converted into *group knowledge*, which can be *reused* by the group.

Over a period of time, you and your friends contribute a considerable amount of your own knowledge and experience to the group's *knowledge base* (in this story, your knowledge base was initially your small library of paper articles, which subsequently evolved into your online portal). Also, considerable external knowledge is contributed by members of the group in the form of articles and case studies. In addition to all this documented or *explicit* knowledge, the group members themselves (your *community*), with their *tacit* knowledge, are an important part of your group's common knowledge base.

One day, you think of purchasing a treadmill for your exercise routine. By now, it has become second nature with you and other members of your group to first go to the *Fitness Freaks* knowledge portal to find information about anything related to fitness. A quick search on the portal shows that a couple of group members have recently posted information about treadmills. One of them has actually purchased a treadmill after researching different models, their features, and where you can get the best prices. She has posted all this information on the portal. In minutes, you have the information that you need to make your decision. Next day, you purchase a treadmill with all the features you wanted, and at a significantly better price than what you might otherwise have paid, thanks to the *application* of knowledge residing in your group's knowledge repository. Without this knowledge repository, you might have spent considerably more time unnecessarily *reinventing* the knowledge that your friend has already gathered. This gets you thinking about the results of your group's little knowledge management (KM) initiative—faster and better results with no reinvention.

When you purchase your treadmill, you learn that the manufacturer has recently introduced a small, inexpensive gadget that can be attached to the treadmill to enable certain additional health-related measurements. This gadget was not available two months ago when your friend purchased her treadmill. When you post this information back into the portal, the same friend decides to purchase this gadget for her treadmill, too. Thus, in the process of *applying* or using the knowledge that already existed in the knowledge base, you have also *added* or *created* some new knowledge that your group did not have.

This happens frequently in KM—in the process of using (or* copying*) existing knowledge, new knowledge is created.

A few months later, you realize that some of the early content in your knowledge portal is now outdated and should be deleted, to keep your knowledge current and relevant. For example, the information on treadmill prices was relevant when it was posted six months ago, but is probably outdated now. You and the rest of your group agree that one person in the group will, by rotation, take the responsibility to delete outdated content at the end of every three months. If this person is not sure whether some content is outdated, he or she can consult other group members before actually deleting it.

One day, one group member has a suggestion. He points out that until now, knowledge sharing on the group's portal has been purely voluntary and sometimes important information is lost. For example, suppose a member of the group, by following a certain fitness regimen, has done a great job of maintaining her health measurements consistently month after month but neglects to post the information. The information about her regimen is clearly of great value to other group members. But what if she forgets to post the information? Or what if she postpones this task because she finds it cumbersome? That's when we come up with another idea. Why not have a *structured process* for knowledge sharing, so that the sharing of relevant knowledge, including best practices, becomes almost mandatory and is not left to chance or choice?

Then another question arises. What is *relevant* knowledge? Given that the objective of our group is to promote good health, any knowledge that is useful for promoting good health becomes relevant knowledge for this group.

The next question is this. What qualifies as a *best practice?* Again, we decide to keep it simple. A practice or regimen that enables someone to maintain healthy measurements (that is, in the normal range) consistently for a period of six months is a potential best practice. A group member who ranks best in the group on a particular measurement consistently for six months potentially has some best practices. The group agrees that it would be mandatory, not optional, for concerned members to post their best practice to benefit the rest of the group. To avoid making this cumbersome, we introduce a simple one-page standard format in which to document a best practice.

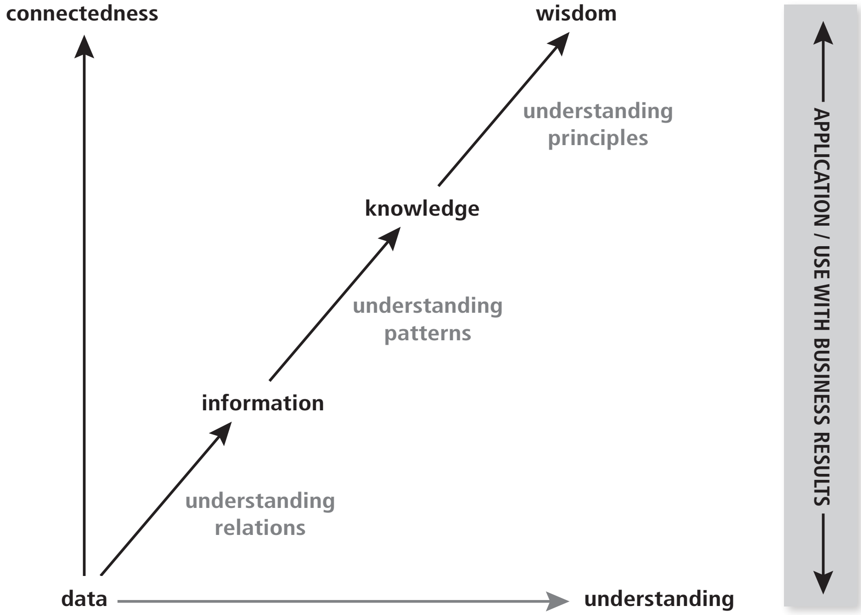
Next, we realize that introducing a process for knowledge sharing is only one side of the coin. Once a group member shares a best practice, should its application or use by other members be left to chance or choice? As all group members are genuinely interested in the goal of good health, we agree among ourselves that *replication* or use of knowledge that is shared must also be a mandatory process, and not left to chance. We introduce a brief document format in which other members can document and share back with the rest of the group how they used someone's best practice and with what results.

> ***After a year of following the standardized processes for knowledge sharing and replication, the group finds that overall health results for every member have improved significantly and consistently.***

We will come back to the *Fitness Freaks* story in a bit.

DATA, INFORMATION, KNOWLEDGE, WISDOM

Much has been written in the KM and information management literature about the data–information–knowledge–wisdom (DIKW) hierarchy or continuum (see Figure 3). The primary purpose of this book is to help readers *implement* or *apply* KM to achieve business objectives. As I learned from my years of experience helping companies to do this, a detailed discussion of DIKW theory is not required for this purpose. Nevertheless, a very brief description is given here for readers who might be interested.


connectedness
wisdom
understanding principles
knowledge
understanding patterns
information
understanding relations
data
understanding
APPLICATION / USE WITH BUSINESS RESULTS

It is essential to understand how to implement KM for business results, and then actually go out and implement. An understanding of the distinctions between data, information, knowledge, and wisdom can be interesting for academically inclined readers, but not necessary if your purpose is to get business results by implementing KM in your company.

Figure 3 Data, information, knowledge, and wisdom—application and results.
(Source for original figure: Bellinger. The part about Application & Results have been added by Arun Hariharan.)

Data: Data represents a fact or statement of event without relation to other things (for example, in the *Fitness Freaks* story, body weight reading, by itself, is a piece of data).

Information: When data are arranged or presented in a way that helps you to understand some kind of *relationship*, possibly a cause and effect, they become information.

Fitness Freaks example: Suppose you measure your body weight every Sunday. If you list the last ten Sunday weight readings and record next to them the number of days you exercised during the previous week, this becomes information. The numbers, arranged in this manner, may help you to find some kind of *relationship* between the two sets of data. You may find a cause and effect between the number of days you exercised and your body weight. This is information.

Knowledge: Knowledge represents a *pattern* that connects information and generally provides a higher level of predictability as to what will happen next. When you advance from information to knowledge, you are able to make a higher level of *generalized* inference.

Fitness Freaks example: Suppose, after studying several weeks of information, you find a pattern in the relationship between your weight each Sunday and the number of days you exercised the previous week. Based on this pattern, you conclude that your weight is likely to be at the desired level when you exercise regularly. This is knowledge.

Wisdom: Wisdom represents a deeper understanding of the knowledge and the fundamental *principles* behind the knowledge. Wisdom is relatively more universal or general than knowledge (Bellinger).

Fitness Freaks example: A clear understanding of the *principles* of fitness, *how* and *why* exercise results in overall good health (of which keeping body weight under control is a component), the consequences of lack of exercise on health—this is wisdom. This wisdom must result in a firm *resolve* or *decision* to exercise regularly.

BUSINESS EXAMPLE

Now let us look at a business example.

Your company received 100 customer complaints in the last week of a month. This is data.

When you look at the complaints data week after week, there seems to be a *relationship* between the week of the month and the number of complaints. There are more complaints in the last week of the month than in other weeks. This is information.

You study the weekly complaints data for the last six months and find a definite *pattern*. Every month, the number of complaints peaks in the last week. This is knowledge.

You investigate this phenomenon and find that it has to do with the monthly sales targets given to salespeople and the way salespeople are incentivized. Traditionally, the behavior of many salespeople in your company (and perhaps in many other companies) is to take it relatively easy in the beginning of the month. As the month nears its end, they realize that they are far from achieving their sales target. In the pressure to achieve their target (remuneration depends on it), some of them try to sell more by making false promises to customers. This results in the higher number of complaints in the last week of every month. You realize that this has to do with the principles of how salespeople are incentivized. This is wisdom. Based on this wisdom, you resolve or decide to change the incentive system in order to correct the behavior of the salespeople. In the future, salespeople will earn some extra incentive if they sell more or less uniformly during the month. This will motivate salespeople to sell throughout the month, and prevent the pressure from building up toward the end of the month.

APPLICATION AND RESULTS

Now the story doesn't end there. It *cannot* end there.

After all, what's the use of all the data, information, knowledge, and wisdom if you don't use or apply them and get results?

In the *Fitness Freaks* example, we see that it is only when you actually carry out your decision to exercise regularly that you will attain your objective of maintaining good health.

In the business example, it is only when you actually implement the new incentive system for salespeople that you will be able to level the sales activity during the month, and attain your business objective of reducing customer complaints that arise due to end-of-month selling pressure.

This book will talk again and again about the application and results of KM with numerous real examples.

Because the primary purpose of this book is to inspire the application of KM to achieve business results, it is enough have a broad understanding of the DIKW concept. It is not necessary to split hairs as to whether something is information or knowledge or wisdom. What is important is that application achieves results, and this book is designed to help with that. In the rest of this book, the words *information* and *knowledge* are used interchangeably.

The focus of this book will be to help you ensure that knowledge (whether you prefer to call it information or knowledge or wisdom) that is **relevant *to your business, from* any *source internal or external to your organization, is available at the right place at the right time to enable the right person(s) in your company to make the right decisions (you may choose to call your decisions* data-*based or well-*informed *or* knowledgeable or wise*) and* implement *them so that you achieve your strategic business objectives.***

In other words, for the purpose of achieving results in your business by using KM, it is OK if you are not sure whether something should be called information or knowledge or wisdom; it is *not* OK if application/ implementation and results are absent.

I hope you enjoyed the *Fitness Freaks* story. If you have read this story, you have understood the essence of the science of knowledge management (KM). Almost everything you need to know in order to be able to implement KM in your organization is contained in this story. This story and KM are relevant to you, whatever the nature of your business—manufacturing, services, healthcare, education, or government.

KM works essentially in the same way in business or other organizations as it did in the *Fitness Freaks* example. Naturally, there might be additional challenges in KM implementation having to do with the size of your business. Whether your organization consists of dozens, hundreds, or thousands of employees and whether these people are located across cities or countries, the fundamentals of KM remain the same. Obviously, there are likely to be additional details we need to know and challenges we need to be prepared for while implementing KM in a business. We will look at these in the remaining chapters. The book contains plenty of business examples from first-hand experience. We will also occasionally go back to the *Fitness Freaks* story to see how certain concepts introduced in subsequent chapters would apply to them.

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THE STRATEGIC KNOWLEDGE MANAGEMENT HANDBOOK

Driving Business Results by Making Tacit Knowledge Explicit

Arun Hariharan

Foreword by Peter A.C. Smith, Publisher and Managing Editor of the *Journal of Knowledge Management Practice*

The primary purpose of this book is to enable you to implement a strategic knowledge management (KM) program in your business and derive business results from it. The contents of this book are relevant to any business—manufacturing or service, and also in education, not-for-profit, government, and other types of organizations.

This book is written for business leaders and executives. It is particularly addressed to CEOs and senior management to help them understand how they can use KM as a strategy to achieve their business objectives. For KM professionals, the objective of this book is to help them to implement KM with real business results.

Everything contained in the book is based on first-hand experience of helping the implementation of these concepts at several companies with significant business results, including some Most Admired Knowledge Enterprise (MAKE) award winners. The book largely tells its story through real examples.

About the Author: **Arun Hariharan** is the Founder & CEO of The CPI Coach (cpicoach.webs.com), a company that provides partnership, consulting and training in knowledge management, business excellence, and related areas. He has helped several large companies in diverse industries achieve substantial and sustained business results and competitive-edge through KM and business excellence strategy and implementation. He is the former President – Quality & Knowledge Management at Reliance Capital Ltd., one of India's largest financial service groups. Previously he was Senior Vice President – Quality & Knowledge Management at Bharti Airtel Ltd. (India's largest telecom company) and Head of Knowledge Management at the RPG Group (a large diverse conglomerate group). He has also worked as a Senior Consultant with Ernst & Young's global management consulting. Hariharan is also the author of *Continuous Permanent Improvement* (ASQ Quality Press, 2014).

For more information on Arun Hariharan, please see the "About the Author" section inside.

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