

Preface

Introduction to Wisdom

A starting point for wisdom is a humble assertion: “I (We) don’t know.” This assertion can be the real beginning of wisdom. Wisdom can be defined very simply as “the ability to judge soundly.” Because business transactions per se do not inspire much wisdom in decision makers, wisdom comes from connecting these transactions to each other and their change over time so that sound judgments can be made. Wisdom requires an intuitive ability, born of experience, to look beyond current situations in order to recognize exceptional factors and anticipate unusual opportunities and outcomes. Largely untapped today, wisdom is a vital organization resource, accumulated through experience, and applied to everyday learning at work. Basically, wisdom is a personal capacity acquired through creative thinking and experience. From this perspective, there is a tendency to replace past hierarchical and functional roles with learning relationships that focus on wisdom as the foundation of the new organization.

Prior Knowledge Management, Business Intelligence, and Smart Business Systems

Today, there are a number of information systems that tell the organization's decision makers where they have been and, to a degree, where they are going, but not much about "what needs to be done" to grow an organization over time in an optimal manner. For example, knowledge management systems give decision makers information and knowledge about an organization's operations while business intelligence systems analyze the results of operations, that is, give decision makers a good understanding of an organization's operations. More recently, smart business systems focus on optimization of an organization's operations beforehand. Although all of these systems represent improvements over time, there is need for a fundamental shift or a new paradigm in how information systems are effectively used by decision makers. More specifically, there is a need to employ optimal knowledge management/wisdom management systems or simply optimal KM/WM systems which provide company decision makers with the ability to connect "points of wisdom" about what needs to be done within and outside the organization for optimal results over time.

Relationship of Knowledge Management, Business Intelligence, and Optimization to Wisdom Management

As will be seen in the text, knowledge management provides a basic framework for business intelligence systems and optimization as found in smart business systems. In turn, both business intelligence and optimization help decision makers make better decisions. In addition, knowledge management is related to wisdom management in that wisdom is the umbrella that brings together not only knowledge in the form of business intelligence and optimization, but also provides the means to assist decision makers in reaching optimal and wise decisions over time. From this view, a new type of systems, that is, optimal KM/WM systems, can be defined. Such systems are forward looking by utilizing creativity and problem finding to the highest degree possible. They utilize the latest new business models that are integrated with e-commerce and the Internet. Overall, optimal KM/WM systems draw upon the basic concepts found in knowledge management, business intelligence, and optimization. As noted earlier, these

newer type systems provide a company's decision makers with the ability to connect "points of wisdom" so that optimal decisions regarding forthcoming opportunities and upcoming problems can be reached today and into the future.

Concepts and Applications of Optimal Knowledge Management/ Wisdom Management Systems

The initial focus in the text is on important concepts underlying optimal KM/WM systems and the need to grow the learning organization over time. The integration of creativity with problem finding as they relate to these newer systems is examined. The development of new business models that facilitate the ability to judge soundly will be explored. Where applicable, newer techniques that focus on a *holistic* approach to an organization's opportunities and problems will be presented. Among these are software packages that center on optimization, goal programming, product lifecycle management, predictive analytics, knowledge discovery (data mining), data visualization, and virtual reality. Throughout the text, there will be a continual reference to getting the big picture in the areas of corporate planning, marketing, finance, and manufacturing. Additionally, the employment of a learning organization to adjust organization operations to meet changing times will be treated. All in all, the essential concepts underlying the development and implementation of these systems are treated. In addition, these concepts form the basis for an extensive treatment of what is the future direction of information systems.

Essentially, the first half of the text centers on the underlying concepts of optimal KM/WM systems. The second half of the text, in contrast, examines essential materials needed to develop and implement these systems. The focus is on their *applications* to assist typical organizations whether they be small, medium, or large. This complete coverage of concepts and applications centering on optimal KM/WM systems is focused on making decision makers more productive. Such systems allow decision makers to connect "points of wisdom" in new and different ways not found in the past for judging more soundly about their decisions about what needs to be done over time.

Text is Useful to a Wide Range of Professionals

The text is designed to assist a wide range of professionals. Top management and their staff, including the board of directors, will be particularly interested in getting involved in developing and implementing optimal KM/WM systems over time. Managers at all levels in the functional areas of a typical organization can also benefit from this text. Information system professionals will find the text helpful in understanding the tie-in of past information systems with optimal KM/WM systems. Consultants will find the text suitable for assisting their clients in moving to this new operating mode. Additionally, the text is suitable for academicians since it can be used in undergraduate and graduate courses. Overall, the text is suitable for anyone desiring to move to a higher level of systems operations on a day-to-day basis that really optimize an organization's performance over time.

Structure of Text

The text's structure is a logical one for a robust treatment of optimal KM/WM systems. The topical areas which are applied to the real world where appropriate are as follows:

Section I: The Challenge of Optimal Knowledge Management/Wisdom Management Systems

The focus of **Chapter I** is on the emergence of wisdom and its related activities to assist decision makers in getting the "big picture" and managing organizational operations on this basis. Optimal knowledge management/wisdom management systems stress the importance of connecting "points of wisdom" that are not found in past or current information systems of various types. Initially, the chapter focuses on answering the question — "what needs to be done" to optimize the operation of a learning organization. In turn, there is a discussion about information and its tie-in with their upper levels — wisdom and truth. Not only is there an introduction to optimal KM/WM systems, but also there is a rich discussion centering on the elements underlying them. This background serves as a basis for defining these newer systems. Also, there is an introduction to functional areas found in optimal KM/WM systems along with two typical applications of these systems.

Section II: Underlying Concepts of Optimal Knowledge Management/Wisdom Management Systems

In **Chapter II**, the basics of creativity are set forth, followed by the utilization of problem finding where the main thrust is on being “proactive” within an optimal KM/WM system-operating mode. Within this framework, an organization that encourages an acceptable tolerance for failure that come from experimentation of new opportunities and resolving future problems is on the right track for undertaking the development and implementation of optimal KM/WM systems. This new mind set is required to meet the challenges facing typical decision makers of today. A fundamental shift in thinking, especially from a creative thinking and problem-finding viewpoint, is needed to beat or, at least, meet global competition today and in the future. As such, this new orientation means that creative thinking and problem finding need to be an integral part of an organization’s corporate philosophy for optimal decision making.

Chapter III covers the basics of computer storage and networking for optimal KM/WM systems. At the outset, future computer technology that will assist in developing optimal KM/WM systems is explored. In addition, business process management and information lifecycle management are examined. Effective computer storage follows next that centers on storage of aged data along with the need for a data federation approach for real-time data. The types of local and corporate wide databases are examined. In the second part of the chapter, the focus is on computer networking that includes wired and wireless technologies. There are a number of topical areas covered, including the Internet and the World Wide Web along with e-commerce. Typically, networking operations must be managed with greater levels of reliability and security than in the past.

In the pursuit of judging soundly about connecting “points of wisdom,” **Chapter IV** explores a wide range of current software packages that are helpful in implementing and growing optimal KM/WM systems. The software explored includes the following: new business models, optimization, goal programming, product lifecycle management, predictive analytics, and knowledge discovery (data mining). In addition, data visualization software and virtual reality software are included. Still other software packages could have been included, such as business intelligence and online analytical processing. In the near future, it is expected that newer software packages will be developed that truly fit under the category of optimal KM/WM systems. In cases where complete optimization is not practical, as in poorly-structured problems, near optimum solutions using the previously mentioned software packages are beneficial to a company’s decision makers.

Section III: Building Optimal Knowledge Management/Wisdom Management Systems

In **Chapter V**, the design and implementation of an optimal KM/WM system requires taking an enlightened approach to the whole development process. That starts with applying creativity to the whole design process that is covered initially in this chapter, followed by the application of the KISS (keep it simple, straightforward) principle. In turn, EAI (Enterprise Application Integration) provides a framework for designing optimal KM/WM systems. Within this design framework, “points of wisdom” can be connected for producing optimal results. Next, the steps essential to developing and implementing effective optimal KM/WM systems are set forth. Included in these steps are those that relate to developing initial applications for connecting points of wisdom and disseminating results to grow wisdom of decision makers over time. In addition, there is a need to transform wisdom into action to meet decision maker’s needs over time.

Section IV: Applications of Optimal Knowledge Management/Wisdom Management Systems

Chapter VI on corporate planning looks at the need to reinvent the organization for optimal decision making, which is influenced by a number of management principles. The important elements necessary for the development of an effective corporate planning model within an optimal KM/WM system environment are set forth along with the model itself and its sub-models. Next, short-to long-range corporate planning is tied-in with executive visioning, problem finding, venture analysis modeling, and evaluating corporate performance. Also, an optimal KM/WM system application that centers on corporate planning is illustrated for a holistic approach to an organization’s operations.

To meet the challenges of the 21st century, **Chapter VII** explores the new marketing power of today’s customers, especially as found on the Internet. Next, an enlarged view of connecting “points of wisdom” in marketing is set forth in a number of management principles not found in the past. The essentials necessary to develop an effective marketing model for optimal KM/WM systems are presented along with an appropriate marketing model and its sub-models. Although many marketing areas could have been explored, the focus is on marketing strategy and sales plans that connect marketing strategy to “points of wisdom” for judging soundly as well as making this strategy an integral part of venture analysis modeling. In the last part of the chapter, an optimal KM/WM system application in marketing is given.

At the outset, **Chapter VIII** examines an organization's visioning and its challenging financial goals. The relationships of globalization to optimal financial decision making and the need to take a global financial and accounting viewpoint are studied. An enlarged view of connecting "points of wisdom" in finance are set forth in a number of newer management principles. Next, the essential elements that underlie an effective finance model for optimal KM/WM systems are examined. In turn, a finance model and its sub-models found in optimal KM/WM systems are set forth. Because the text centers on making effective or wise financial decisions today and tomorrow, the area of financial performance is examined in some depth. In addition, an optimal KM/WM system in finance is given that takes a holistic approach to a firm that is experiencing growing financial problems.

The first part of the **Chapter IX** looks at the need to rethink manufacturing operations from a broad perspective so that optimal decision making in this area is the order of the day. Additionally, conventional wisdom versus an enlarged view of connecting "points of wisdom" in manufacturing are examined. The requirements for developing an effective manufacturing model for an optimal KM/WM system are explored, followed by a manufacturing model and its sub-models. Due to the importance of production planning and execution in determining what should be produced daily, it is examined in detail with particular emphasis on making it an integrated part of product lifecycle management. Also, an optimal KM/WM system application is given for manufacturing.

In **Chapter X**, there is a last look at creative thinking and problem finding. Many times, a creative approach may signal the need for new business models that are more reflective of the times. Next, a review of appropriate computer software that is useful in optimal KM/WM systems is set forth. The main focus of the chapter is on effective applications in the areas of corporate planning, marketing, finance, and manufacturing. Additionally, an application is given as a holistic approach at the end of the chapter. For all companies, the accent is on assisting organizational personnel at all levels on a day-to-day basis for connecting "points of wisdom" within and outside the organization for optimal decision making over time.

Section V: The Impact of the Future on Optimal Knowledge Management/Wisdom Management Systems

Chapter XI examines a fourth-dimensional view that underlies newer developments that really affect optimal KM/WM systems. Future computer storage, networking, and software developments are discussed, followed by important considerations for developing and implementing a well-designed system. Future

developments in the areas of corporate planning, marketing, finance, and manufacturing are examined and their tie-in with improving a company's decision makers wisdom. Also, there is a discussion on the continuing need for supporting optimal KM/WM systems to assist a company's decision makers over time. Lastly, there is a concluding reference to truth management systems.