Competitive advantage is the ability of a firm to acquire better resources or to make better use of its resources than other firms within the same market and thereby improve its position relative to those firms (and potential entrants) within that market (Barney, 1991). Barney (1991, p. 101) states further that firm resources include “... all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm...” and that these resources fall into three categories: physical capital, human capital, and organizational capital. Within these categories, we find that knowledge is captured in two of them:

1. **Human Capital**: Where knowledge and insight of individuals is found.
2. **Organizational Capital**: Where the relationships of people within the firm and those with others within its competitive environment are found.

The resource-based theory of the firm “suggests that firms obtain sustained competitive advantages by implementing strategies that exploit their internal strengths through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses” (Barney, 1991, p. 99). While this paradigm represented strides in researching the sources of competitive advantage, it is focused on how a firm can capitalize on imperfections in the market to achieve competitive advantage (Lopez, 2005). Conversely, Spender (1996) argues that competitive advantage must come from within the firm, since the external resources (physical capital) available to one firm are available to all. The shift in the analysis of competitive advantage within the literature has therefore been to the knowledge-based theory of the firm and to the ways in which firms can create, store, use, and manage knowledge assets to provide and sustain a competitive advantage in the marketplace. This requires the integration of units across an organization, some of which may be rather specialized. The literature labels this type of integration “interdependence,” since it represents more than combining a set of similar instances into a single whole. The term interdependence includes the reliance of a firm’s component parts on one another to work together efficiently. As Grant (1996, p. 114) put it, “A knowledge-based view of the firm encourages us to perceive interdependence as an element of organizational design and the subject of managerial choice rather than exogenously driven by the prevailing production technology.”

Older theories carry an implicit assumption that valuable knowledge comes from the top down (Spender, 1996); however, more recent work suggests that knowledge at the top of the management hierarchy is not as privileged as once was thought and that knowledge generated by those in the trenches and closer
to the customers has gained a much greater level of importance. As employees become empowered with this increasing amount of emphasis placed on knowledge creation at all levels of the organization, the firm can develop a competitive advantage by focusing on its human and organizational capital. These categories of resources hold the firm’s knowledge: one at the individual level and the other at the organizational level.

In an effort to juxtapose the thoughts, ideas, and theories of knowledge management researchers who have followed the paradigm shift that has occurred as we have described, this volume has come together. We seek to update our understanding of how knowledge management relates to the competitive advantage of organizations. Although this topical area continues to receive a lot of attention in the literature, we felt that in addition to conventional assessment it could be invigorated by additional perspectives not commonly shared or that are in early stages of development. We sought contributions from around the world to make this happen and were pleased with the response that we received. As a result, this volume has an international flavor that offers a wide variety of viewpoints along a set of common themes. Further, we were happily surprised by the wide range of topics, contexts, and approaches that were submitted, and we are excited to present you with what we consider to be the best of the submissions we received.

Because of the variety of topics in the submissions, we grouped them together based on their coverage of similar issues and developed four themes. Two chapters explored the capability of firms for developing organizational knowledge into competitive advantage and so we call this theme “Knowledge Capability.” Six chapters fit nicely into a theme we named “Organizational Learning and Knowledge Development.” We named the third theme “Knowledge Transfer” as five of our contributed chapters discuss the ways knowledge can be moved or transferred within an organization. Our final theme is “Knowledge Retention” as the four chapters within this theme are focused on the ways in which an organization must work to retain the knowledge it has generated so as not to lose its competitive advantage. We now discuss the contents of each chapter in greater detail.

**KNOWLEDGE CAPABILITY**

This theme provides an overview of how organizational knowledge acts as a capability and influences competitive advantage. The two chapters, one by Holsapple and Oh and the other by Nissen, are organized around the dynamic nature of knowledge capabilities. Holsapple and Oh focus on the use of knowledge chain theory and classifying capabilities into reactive and proactive categories. They also identify the appropriateness of knowledge for specific environments. Mark Nissen examines how organizations can utilize knowledge flows to gain or maintain competitive advantage, and he provides important applications for organizations to consider. In particular, he suggests that organizations should pay close attention to their people, processes, and technologies as they manage issues such as the uneven distribution of knowledge across the organization and the differences in appropriability of explicit and tacit knowledge resources.

**ORGANIZATIONAL LEARNING AND KNOWLEDGE DEVELOPMENT**

The six chapters within this theme focus on the ways in which organizations can create knowledge that is useful for gaining a competitive advantage.
The first chapter, by Chung, Ling, Peng, and Chen, develops a model of how learning influences the relationship between knowledge creation and creativity. They explore how knowledge institutionalization and characteristics of knowledge, such as its tacitness, influence creativity. The authors develop a model in which organizational learning becomes a mediator between the knowledge creation capabilities of an organization and its creativity. The interested reader might like to compare his or her own organization to the model developed in this chapter and use it to assist in making improvements.

Continuing the theme of organizational learning, the second chapter by Eric Kong looks at how social intelligence promotes the acquisition of external knowledge. He then describes how external knowledge can then influence human capital and organizational learning. His work helps to remind us of the importance of integrating internal and external knowledge when building competitive advantage.

In the third chapter, Franco, Di Virgilio, and Di Pietro take a slightly different way of looking at organizational learning. Such learning might also be called group knowledge, because it can be accessed through group participation and sharing that occurs naturally among group members. The authors therefore focus on group knowledge and the technologies that assist in its development. Specifically, they discuss how group knowledge accrues due to interactions through electronic media, which they call “Electronic Word-Of-Mouth” or E-WOM. They develop a framework to help organizations better understand group knowledge and improve the integration of individual knowledge into collective (group) knowledge.

The fourth chapter by Delbaer, Zhang, Bruning, and Sivaramakrishnan relies on empirical data to formulate a Structural Equations Model (SEM) to show the relationships between market orientation, learning orientation, and knowledge management. These relationships are particularly important because, as the model demonstrates, they affect market performance. Once again, the interested reader may compare and contrast his or her own organization to the model developed and empirically verified in this chapter.

In the fifth chapter, Khasawneh and Alazzam take a slightly different view of knowledge management as it relates to competitive advantage—customer knowledge. What better way is there to improve your organization’s competitive stance than to learn what the customer is thinking about your firm? The chapter discusses learning about customers and what to do with that knowledge in terms of customer service. It examines how collecting and managing customer knowledge can help an organization improve its interactions with those customers.

The sixth and final chapter of this section, by Tatachari, Manikandan, and Gunta, emphasizes that organizational learning and knowledge management have been thought of as separate and distinct, when they should have been combined into a single research stream. The authors show how knowledge management falls into a category of possession in which knowledge is thought to be an object that can be captured, stored, and retrieved as needed, while organizational learning is process-oriented and therefore seen quite differently. The result is a blending of the two epistemological viewpoints, and we felt that this perspective would be an excellent way to conclude our section on organizational learning.

**KNOWLEDGE TRANSFER**

This theme contains five chapters that focus on how knowledge can be moved to or accessed by new parts of the organization.

The first chapter, by Neeta Baporikar, identifies common barriers that organizations face when attempting to implement a knowledge management program and ensure that it is aligned with the strategic goals of the organization. It then offers insights as to how to overcome these barriers and admonishes
managers that the management of knowledge and its transfer is one that should be taken seriously and approached judiciously and assiduously if competitive advantage is to be gained from it.

The second chapter, by Van Canh and Zyngier, focuses on the sharing of academic knowledge by examining the process through ERG theory. They apply their theory to a developing economic country in which the transition to a modern and academically viable and highly competitive economy is difficult and fraught with problems that develop from corruption and the dominant nature of a centralized bureaucracy. While they specifically address the issues occurring in Viet Nam, their insight could be applied to any developing country. One might also extend their theory to those developed countries that undergo a massive political change, such as the former Soviet Bloc countries and the Arab states that are now in the midst of such change.

Petter Gottschalk is the author of the third chapter in this section, and his focus is on a very specific type of organization—knowledge transfer and management within police organizations. This provides a seldom-seen example that illustrates the importance of knowledge sharing in varied situations. We find this chapter particularly important in light of recent events throughout the world in which police agencies are forced to share and transfer information and knowledge regarding events and people that affect the well-being of both individuals and society as a whole. Readers should find this chapter very interesting, and we hope that police and other agencies devoted to security and enforcement find his study enlightening.

The fourth chapter in this section is by Chilton and Bloodgood who focus on automated knowledge sharing. They discuss expert systems, the conversion of knowledge from subject matter experts into expert systems and data mining techniques as they can be applied both to a firm’s own transaction data and to social media. The current and potential customers of a firm have found social media as a way to express their wants and needs of products and services, and this represents an important resource for firms to understand the preferences and activities of people as it relates to their products and services. As important as this knowledge is, the authors also discuss how it can remain within the walls of the firm that discovered it, much as tacit knowledge is retained by an individual.

The last chapter in this section, by Bloodgood, Chilton, and Bloodgood, focuses on how the motivation and capability of individuals affect knowledge transfer efforts and success. The authors approach the topic from the Awareness, Motivation, and Capability (AMC) perspective developed in the strategic management literature. They discuss the factors that affect knowledge transfer and the relationships among these factors. Recommendations are provided to assist organizations in implementing successful knowledge transfer practices.

**KNOWLEDGE RETENTION**

Knowledge is of little use to an organization unless it can make it available to its members while at the same time preventing it from being discovered by those outside the firm. Losing such knowledge would seriously affect its competitive advantage, perhaps reducing or eliminating it. We have assembled four chapters aligned with this topic in this section.

The first chapter is by Erickson and Rothberg who provide an insightful discussion on how the combination of circumstances and knowledge characteristics should be managed by organizations in order to protect knowledge. They contrast their balanced approach with the more conventional and aggressive
method of knowledge development that is spread more widely throughout the firm. This, they argue, renders knowledge more vulnerable, and so they suggest that firms must pursue a knowledge management strategy that is based on their position in the market.

The second chapter in this section was written by Murray Jennex. In this chapter, he develops a process to assess the risk of losing knowledge to transient workers. Organizations that might lose workers for various reasons, whether due to transience, retirement, or other reasons would be well served to utilize his suggestions and incorporate methods that capture any knowledge these workers might possess in order to retain it. While he focuses on the nuclear industry, his process and framework could be applied to any organization with personnel holding knowledge that might be instrumental in maintaining a competitive edge. These employees are termed knowledge workers and tend to focus on non-routine problems.

The third chapter, by Masrom, Mahmood, and Alaraimi identifies, defines, and explains several different types of knowledge embedded in organizations. They then identify several methods for protecting knowledge from loss. Finally, they focus on the protections that can and should be afforded to tacit and explicit knowledge and form a model to further explain the variables within an organization that are affected by the need to protect its knowledge base. The authors form propositions based on their model to show how the variables that they identified might interact.

The last chapter in this section is by Ben Tran who examines the human element of knowledge management. His thesis is that protecting knowledge is not a function of the knowledge itself but of the people who must do so. To develop this thesis, he discusses knowledge workers, learning organizations, and various aspects of knowledge and its relationship to these workers and their organizations.

**SUMMARY**

We bring together a truly international perspective in knowledge management in this volume. The expertise provided herein comes from all over the world, and although there are common themes among the chapters, each provides a unique viewpoint that results from cultural and geographic differences. We believe that such diversity of thought is a necessary component in the advancement of the body of knowledge, regardless of the discipline of inquiry. We hope that you agree and that you enjoy the contributions of our authors.

Overall, we feel that these chapters are a good blend of extant and new research. The common link of competitive advantage among them provides an opportunity to enhance understanding of the role that knowledge management plays in the creation and sustenance of competitive advantage for organizations. We hope this enhanced understanding stimulates additional research in these areas. We have learned a lot from these chapters and we hope you do as well.

*Michael A. Chilton
Kansas State University, USA

*James M. Bloodgood
Kansas State University, USA*
REFERENCES


