Knowledge management as competitive advantage: lessons from the textile and apparel value chain

Paula Danskin, Basil G. Englis, Michael R. Solomon, Marla Goldsmith and Jennifer Davey

Abstract

Purpose – The purpose of this research is to investigate knowledge management in the textile industry specifically through the relationships and interconnections of knowledge management systems, strategy and firm performance across the value chain.

Design/methodology/approach – This research examines the process of acquisition, retention, maintenance, and retrieval of knowledge both within the firm through organizational memory and across the value chain. A series of case studies examines how Invista (a Du Pont subsidiary) manages knowledge internally and externally through relationships with downstream partners across a single value chain within the textile industry. Qualitative interviews assess the “state of the industry” regarding knowledge management systems.

Findings – Differentiation through knowledge is difficult in practice. Invista has taken the first steps to develop knowledge management systems that connect the internal and external knowledge base to gain competitive advantage. Establishing internal knowledge management systems for organizational memory creates opportunities to minimize knowledge isolation in functional departments and creates a greater base for tacit learning to be leveraged. External knowledge management systems bring value chain members closer together and add value to the product (i.e. increased quality, customer perceptions of brand platforms) throughout the value chain. Active external knowledge systems create opportunities to reap the full benefits of internal knowledge and knowledge from other firms within the network.

Originality/value – This paper describes the process of acquisition, retention, maintenance, and retrieval of knowledge within the firm by improving organizational memory and across the value chain through knowledge management systems to gain competitive advantage.

Keywords Textile industry, Knowledge management, Organizational development, United States of America

Paper type Research paper

Since the late 1990s, the US textile industry has seen increasing competition from overseas firms. As labor costs in countries such as China, India, and Vietnam is much lower than in the USA, this has created strong downward price pressure for all textile and apparel products. From 1996 to 2002, the cost of textile imports has dropped 33 percent (ATMI, 2003). The USA textile industry has tried to compete on the basis of cost, but it has largely been unsuccessful.

A crucial problem for the US textile industry has been to find means of differentiating its products in order to compete with off-shore manufacturers on a non-price basis. One way of achieving such differentiation is to bundle tangible goods with unique and difficult to replicate services. Knowledge that aids firms in strategic product and market development is one way of achieving differentiation and competitive advantage. However, the ability to store, capture and disseminate knowledge within and across organizational boundaries has challenged managers for many years. As product life cycles have accelerated, environmental complexity and volatility have increased, and the need to manage knowledge has become more intense. The quest to innovate through research and
development, and the need to both share such developments and to “protect” them, are essential for firms to compete. As a consequence, many firms now view knowledge and knowledge management as part of their strategic orientation. Low-cost strategies emphasize knowledge that can be used to cut costs, lower prices and shorten cycle times, whereas differentiation strategies often emphasize knowledge that adds value to a product by giving it unique characteristics that will differentiate it from the competition.

Many firms view the acquisition of new knowledge as a route to competitive advantage. However, few firms fully realize the benefits from this highly valued knowledge (Hansen et al., 1999). Effective knowledge management systems represent one means of realizing additional benefit beyond product innovation. Knowledge that is isolated in one department or in one part of the value chain is not being used to its full extent. New knowledge should be harnessed and managed through internal knowledge management systems that create opportunities for other areas to learn and jump on the learning curve of a company’s innovations. These internal systems provide platforms for further knowledge transfer to external partners. By implementing internal and external knowledge management systems, firms can experience greater competitive advantage and sustained success over a longer period of time.

This project investigates knowledge management in the textile industry in five ways. First, the existing research on knowledge management is reviewed and key terms such as the contexts and characteristics of knowledge are defined. This section ends with a discussion of internal and external knowledge management systems. Next, we examine the role of strategy using examples from the textile industry to illustrate the importance of knowledge as a source of gaining and maintaining competitive advantage. Third, we consider the role of value-chain partners in sharing knowledge. We are particularly interested in examining external knowledge sharing that leads to developing or maintaining competitive advantage. Here we focus a case analysis on Invista’s business strategy with regard to the Lycra® brand (Lycra Assured). Next, we introduce our model, which delineates the relationships and interconnections of knowledge management systems, strategy and firm performance across the value chain. Finally, we present the preliminary results of a case analysis involving Invista’s Lycra Assured strategy. This case study illustrates the differential strategic value of leveraging knowledge across the value chain to maintain competitive advantage. The paper closes with a discussion of the implications of managing knowledge to gain and sustain competitive advantage in the textile industry.

Knowledge and knowledge management

The quest to innovate through research and development is essential for firms to remain ahead of competitors. Indeed, many firms view the acquisition of new knowledge as a way to gain and maintain competitive advantage (Hansen et al., 1999). However, few firms fully realize the benefits from such highly valued knowledge.

Before we explore the construct of the knowledge management system, it is essential to define knowledge. Davenport and Prusak (1998) describe knowledge as:

...a fluid mix of framed experience, important values, contextual information, and expert insight that provides a framework for evaluation and incorporation of new experiences and information.

Of course, more than one type of knowledge exists. DeLong and Fahey (2000) developed a useful framework to classify knowledge, which distinguished among human, social, and structured knowledge. Human knowledge is what humans know or know how to do. For example, this can be based on previous experience such as that of a sewing operator who has many years of experience stretching pieces of fabric to fit together to create a final product (Abernathy et al., 1999). Social knowledge is usually tacit knowledge that arises out of relationships. An example of social knowledge is the way employees at different levels in the employment hierarchy interact with other employees (e.g. a cutter and a finisher versus a cutter and a manager). Structured knowledge is rooted in the systems, processes, rules, and routines of an organization and is usually explicit knowledge (DeLong and Fahey, 2000).
Within these classifications lie additional dimensions (Garud and Nayyar, 1994) including codifiability, simplicity/complexity, and systemic/independent, and velocity/viscosity.

Some knowledge is more easily codified (Garud and Nayyar, 1994). Explicit knowledge is knowledge that can be easily communicated to others and is thus more readily codified. For example, the process used to manage retail inventory replenishment is explicit and codified. Tacit knowledge is typically more intuitive, learned over a long period of time, and, therefore, not that easy to codify and communicate to others. For example, the art of French cooking is a learned experience, even with recipes as guides.

Another characteristic of knowledge is its degree of simplicity or complexity. The continuum of simple – complex captures the amount of information needed to communicate knowledge. Simple knowledge needs little information, whereas complex knowledge needs a greater amount of information (Garud and Nayyar, 1994). An example of simple knowledge would be how to recognize cotton growing in a field (a few simple cues), while complex knowledge would be how the chemical structure of Teflon adds value to cotton if blended into the fabric (complex chemical engineering information).

Another aspect of knowledge is the degree to which it is embedded within a system. Independent knowledge exists independently of a social or organizational system whereas systemic knowledge is dependent on context. An example of independent knowledge is the chemical structure of Teflon as compared with knowledge of how product development teams are selected within a specific organization. The final two characteristics of knowledge that are important for understanding knowledge transfer are velocity and viscosity. Velocity refers to how rapidly knowledge can move through an organization while viscosity refers to the “richness” of knowledge (Bhagat et al., 2002). For example, news of impending layoffs is easily transmitted and typically travels quickly through a firm very quickly. In contrast, the knowledge needed to impart a new product development process to colleagues would be highly viscous and would travel slowly. Table I illustrates the interactions of these knowledge characteristics.

**Knowledge management systems – internal processes**

The effectiveness of building knowledge within the firm depends on the firm’s ability to monitor and absorb newly acquired knowledge from many sources and then to integrate this knowledge into its existing knowledge base (Cohen and Levinthal, 1990; Hamel, 1991;
Hansen et al., 1999; Leonard, 1995). Thus, firms must internally organize and manage existing knowledge. Such organizational memory is defined as:

... the means by which knowledge from the past is brought to bear on present activities, thus resulting in higher or lower levels of organizational effectiveness (Stein, 1995).

Businesses can benefit from organizational memory by implementing knowledge management systems that help to organize and preserve the knowledge of a company. Establishing organizational memory via knowledge management systems is an essential task before firms venture into knowledge sharing with value chain partners. If internal knowledge management systems are not in place, then organizational learning will not occur and new knowledge will not be stored in organizational memory. Before developing knowledge management systems, businesses need to understand the process of organizational memory. As shown in Figure 1, this process is divided into four separate parts:

1. Acquisition.
2. Retention.
4. Retrieval (Stein, 1995).

**Acquisition.** Knowledge is acquired both internally and externally. The major source of internal knowledge acquisition for a business is through research and development. Researching new knowledge helps businesses to develop new products and stay competitive in the market. In order for external knowledge to be acquired, firms must research work that has previously been published. For example, a business developing a new product could research previous products that may be similar, therefore gaining valuable insights as to whether or not the product will be successful.

**Retention.** Three mechanisms aid in the retention of knowledge. These mechanisms are:

1. Schemata.
2. Scripts.

A schema is defined as an "... individual cognitive structure that helps people organize and process information efficiently" (Stein, 1995). Stein (1995) describes schemas as "represent(ing) categories of information that share a structural property such as membership in a conceptual group". In comparison, a script describes the "appropriate sequencing of events in conventional or familiar situations" (Lord and Kernan, 1987). Organizations typically have particular procedures that are followed as, for example, when a group of employees are involved in meetings. This procedure helps the employees to retain as much knowledge as possible compared to a system where each meeting followed a different procedure.

At an organizational level, a system can be defined as "... a set of inter-related elements which are connected, either directly or indirectly" (Ackoff, 1971). Knowledge management systems are typically databases that record knowledge for future use. However, an organization may have knowledge embedded within its social networks. An example of this

![Figure 1: Internal organizational memory](image-url)
is the “water-cooler” effect, which involves the informal verbal passing of knowledge between co-workers. The retention of knowledge from these informal networks is comparably higher than the retention of knowledge from distributed information systems. However, knowledge is not easily maintained through informal networks and therefore must be documented in a knowledge database in order to be preserved for future use.

Maintenance. The maintenance of knowledge is very important to a business. If knowledge is not properly maintained, it can become misconstrued or lost altogether. When information is stored within individual minds, the maintenance of this knowledge becomes complicated. For example, research shows that the organization memory suffers when employees leave due to the valuable knowledge they take with them (Flamholz, 1974). This impact is even greater when experts leave. Creating experts involves years of experience, training and education to gain the requisite knowledge, skills, and abilities (Hamel and Prahalad, 1990). There are a few ways to combat this problem. Cohen and Levinthal (1990) suggest that when employees leave, preserving organizational memory can be increased by maintaining relationships with outside sources including using former employees as consultants.

Retrieval. The retrieval of information is one of the most important aspects of organizational memory. Individuals must be motivated in order to retrieve information. A major problem within organizations is the fact that employees view knowledge as a method of securing their jobs and are reluctant to share information. Therefore, managers need to pay special attention to their organizations support of knowledge sharing in order to be successful. Ernest & Young, for example, evaluate and reward their employees based on their “contribution to and utilization of the knowledge asset of the firm” (Hansen et al., 1999).

Knowledge management systems – external advantages

Knowledge is rarely shared between firms, even if they are in the same value chain. External knowledge management systems are generally internet-based systems that link members of the value chain. For example, Dell Computer is ranked “best-in-class” by Wall Street analysts for its management of inventory, logistics, and operations across its value chain (Modern Materials Handling, 2003). Dell earned this ranking by developing a business model that increases sensitivity among value chain members to customer satisfaction (Teresko, 2001). Dell posts point-of-sale and demand forecast information online for all suppliers to access (Strausl, 2001). Dell’s Internet postings allow suppliers to minimize channel inventory while emphasizing velocity and flexibility (Strausl, 2001; Teresko, 2001).

On a functional level, external knowledge management systems can allow every member of the value chain to “see” the operations of every other member through production schedules, shipping schedules, ordering schedules, and inventory levels. At a strategic level, knowledge management systems when shared across the value chain bring the “voice of the customer” very clearly into the process by allowing the entire value chain to view changing customer preferences. Early knowledge of changing consumer preferences creates opportunities for all members of the value chain to react almost immediately, thus reducing cycle time of product development and change.

External knowledge systems also bring the value chain members closer together and add value to the product throughout the value chain. These processes yield competitive advantage by creating products that are differentiated from low cost substitutes in the market place. They also lower costs by increasing communication and eliminating steps in the manufacturing process that are either unnecessary or redundant. Value chain partners can also experience rapid learning by jumping onto another’s learning curve with particular processes or procedures such as Six Sigma. Knowledge sharing leads to increased quality and heightened customer perceptions of brand platforms. External knowledge sharing is becoming increasingly important as international competition increases and value chain boundaries become blurred.

Proactive knowledge management systems reap the benefits of reduced costs and cycle time, but they also link the voice of the consumer to all stages of product development, production, and distribution. Invista currently hosts an online fabric library accessible to
anyone, not just those already a member of its value chain, via the internet. This library is the largest, best-used online fabric library in the world; it contains over 22,000 fabrics from 500 mills in 64 countries (Freeboarders Inc., 2003). Interested apparel makers can check if Invista is able to fulfill an order before placing that order and to sample a variety of fabrics blended at the mills. Both Invista and its clients benefit from this system. By sharing this product information, Invista can better understand the needs of apparel makers for improved fabrics that exhibit superior performance in such areas as durability, breathability, and quicker drying times. Both parties benefit from drastically decreased time-to-market, decreased expenses for outsourcing fabric, and increased product usage.

The knowledge management model

The interaction of firm strategy, value chain partners, and knowledge management systems is shown in Figure 2. In the section below, we discuss each part of the model and suggest the implications for firm competitiveness in the textile industry.

Types of knowledge management systems

There are two general types of knowledge management systems that firms use to provide a basis for renewing competitive advantage. Passive knowledge management systems such as the EDI system used by Wal-Mart (Ward’s Auto World, 2003) are distinguished by their orientation to the “present” and tend to be used with channel members such as suppliers to more closely schedule component deliveries, reduce cycle time, cut inventories, and decrease the overall costs of production based on current behavior of buyers and sellers.

In contrast, proactive knowledge management systems (such as Molex’s integrated knowledge management system in the automotive industry (Ward’s Auto World, 2003) have a “future orientation” and tend to be used with channel members to add value to the product as it passes through the value chain. Proactive knowledge management systems reap not only the benefits of reduced costs and cycle time, but also develop valuable knowledge that anticipates future buyer/seller behavior (e.g. market back R&D).

Proactive knowledge management systems do not simply enhance efficiency through time and cost savings. They also provide a way to link and leverage the “voice of the consumer” to all stages of product development, production and distribution through the value chain. While anecdotal evidence suggests that some firms are building knowledge management systems that include both proactive and passive systems to provide feedback loops throughout the value chain, there is no empirical research relating these developments to strategy, value-chain position, and firm performance.
Firm strategy

Porter’s (1980) generic business strategies are a widely used typology that identifies potential routes to competitive advantage within an industry. Two such strategies are of particular relevance to the apparel and textile industry:

1. A cost leadership strategy, which requires a firm to emphasize those variables that allow it to achieve and maintain low per unit costs.

2. A differentiation strategy, which is based on creating a unique image or value for a product or service.

Furthermore, a review of the literature applying Porter’s framework of generic strategies leads us to the conclusion that the US textile and apparel industry is most likely to pursue one of two primary types of differentiation strategies:

1. Market-based differentiation where an organization seeks to set itself apart from the competition primarily through product positioning.

2. Innovation-based differentiation where the organization attempts to differentiate itself through innovative application of technology to meet customer needs.

In the first (more common situation), the firm closely monitors competitors so that it can differentiate its goods or services from those of its rivals. In contrast, innovation-based differentiation is less concerned with positioning against the competition and more with developing entirely new markets. This strategy is successful only insofar as the innovation appropriately anticipates future market/customer needs, desires, aesthetics, etc. It has great potential for the textile industry, as it is not based simply on brand differentiation, but rather on creating a shared and dynamic “knowledge network” throughout an integrated value chain. This network in turn can enhance the flexibility and profitability of the value chain, enabling anticipation of changing market dynamics and more effective new product innovation to meet those market changes.

Value chain position

The concept of industry value chains reflects the value-added, natural sequence of operations or stages in a chain of supply (Porter, 1985). The value chain in the textile and apparel industry begins with a raw material extraction or production stage (i.e. harvesting cotton, or developing new synthetic fibers) that supplies the second stage of primary manufacturing. The second stage usually produces a standardized output of commodity material (fibers and fabrics) used to fabricate commodity products. Progressing downstream, commodity products from the previous stage are used by manufacturers, who apply product development technologies, patents, and proprietary features to further add value. The next stage includes marketers of consumer products, followed by distributors and finally, the retailers who sell to the final consumer. The stage a firm occupies along its industry’s supply chain has important implications for its strategy development and, therefore, its ability to compete.

Porter (1985) cites a number of ways that firms can leverage linkages across their value chains to reduce cost, increase performance and be more effective. These leverage opportunities include: performing the same function in different ways (e.g. specifying close tolerances), improving the cost or performance of indirect activities (such as improved

“Effective knowledge management systems represent one means of realizing additional benefit beyond product innovation.”
delivery time based on servicing customer needs gained through online data), reducing the need to demonstrate, and explaining or servicing a product in the field by performing these activities within the firm (such as co-design with customers through internet-based platforms). Only recently have knowledge management systems as a means of aligning and optimizing value-chain relationships received attention by textile researchers (see Cahill et al., 1999).

**Invista case study**

There are several competitive forces impacting the apparel division of Invista that make this study relevant. First, China’s presence in the textile and apparel industry is growing rapidly. Second, polyester technology has become a non-protected technology as original patents have expired and engineering knowledge has become widely disseminated. Finally, spandex (the generic form of Lycra) use in a wide range of textile and apparel products has expanded very rapidly over the past two decades (Pallerino and Williams, 2001).

**Invista history**

Invista began as Du Pont Textiles and Interiors (DTI) in the 1930s as a part of DuPont de Nemours & Company. In the summer of 2003, after being a wholly-owned subsidiary for nine months, DTI became a separate firm named Invista. Headquartered in Wilmington, Delaware, Invista is the world’s leading integrated fibers company. Revenues in 2002 totaled $6.3 billion, with 300 plants in 50 countries and 22,000 employees.

DuPont decided to separate the textiles unit after top management decided to focus on several growth platforms. Those platforms are electronic and communication technologies; performance materials; coatings and color technologies; safety and protection; and agriculture and nutrition. Invista was already a global leader in numerous categories, largely due to key branded fabric technologies, including Lycra (to provide stretch and recovery to a broad array of textile and apparel products), Stainmaster (to protect carpet from staining), and Antron carpet fibers. Given these key technology platforms, Invista is divided into three businesses units: Apparel; Interiors and Industrial; and Intermediates that occupy different positions along the value chain (Richardson, 2003).

**Value chain position and Invista’s business divisions**

**Apparel**

According to Du Pont’s reporting of DTI 2001 revenues, the apparel division comprised 31 percent of total revenue (Du Pont, 2002). The apparel division works closely with businesses such as Nike, Donna Karan, Levi’s, and Cintas to develop fibers and fabrics that meet the needs of consumers. The Apparel Division manufactures such products as Lycra, Supplex, Cordura, Tactel, Coolmax and Sorona. These fiber technologies usually go into active wear and outerwear products (Pallerino and Williams, 2001).

The business strategy for the apparel division is now concentrating on linking the value chain, brand benefit platforms, and identifying product-benefit packages that can gain critical mass in the sense of being worth additional R&D efforts on the part of Invista. In this regard, the first supply chain management concept Invista launched is Lycra Assured. (Pallerino and Williams, 2001). The Lycra Assured program is aimed at differentiating Invista’s “stretch and recover” fiber from low-cost competitors by bundling the molecule (spandex) with knowledge that assures value chain members of the eventual performance characteristics of products for the end user.
Interiors and industrial

The interiors division provides consumers with products in many areas including, bedding, flooring, furniture, personal care, and travel. The industrial division provides consumers needing airbags, gloves, and technical products with innovative products. This division also serves government and specialty markets. According to Du Pont’s reporting of DTI 2001 revenues, the interiors and industrial division comprised 34 percent of total revenue (Du Pont, 2002).

Intermediates

The intermediate division provides pharmaceutical and agricultural markets with high-performance products. According to Du Pont’s reporting of DTI 2001 revenues, the intermediates division comprised 35 percent of total revenue (Du Pont, 2002). The intermediates business is not a main focus of this study. In terms of value chain position for each of the business divisions, Invista is predominantly located upstream at the molecular level and generally, at the farthest distance from the consumer.

Knowledge management systems

Our emphasis in this paper is on the first supply-chain management concept launched by Invista – Lycra Assured. This was offered to Invista value-chain members through the Lycra Accredited Mills program. This program utilizes a web-based knowledge management system that facilitates Invista’s contact with every segment of the value chain. This increased contact should increase Invista’s influence on the value chain to gain quicker time-to-market.

We are currently examining Invista’s knowledge-sharing initiatives that link the value chain, brand benefit platforms, and critical mass. Invista touches every segment of the value chain, and web-based systems are expected to facilitate value chain influence, create value-added product infusion, and obtain quicker time-to-market. Two programs currently under exploration are the Lycra Assured program that originated with Lycra Accredited Mills and the Du Pont Textile and Apparel group’s online fabric library. With the introduction of the web-based knowledge management system that brings the voice of the consumer to the molecule development, Invista is moving toward a proactive knowledge management system.

Increasing performance through knowledge management

Invista is becoming a proponent of knowledge sharing. As previously noted, the company hosts an online fabric library that is the largest, best-used online fabric sourcing library available to the apparel industry. Usage of the library increased almost 1,000 percent in the first quarter of 2003; during this time 20 percent more brands, retailers, and manufacturers used the service as compared to 2002. This library has been instrumental in driving interest in Lycra. One of the main reasons usage increased so dramatically is due to the SARS virus and firms’ reluctance to have fabrics made in countries where SARS is prevalent. The Online Fabric Library allows apparel makers to sample a variety of fabrics made with Invista’s fibers. This library has decreased time-to-market and expenses for sourcing fabric (Freeboarders Inc., 2003).

Discussion

The goal of our project was to fundamentally enhance the process of acquisition, retention, maintenance, and retrieval of knowledge both within the firm by improving organizational memory and across the value chain through knowledge management systems to gain competitive advantage. Historically, Du Pont has established a strong record of acquiring and
developing knowledge internally. Our research has found that the next generation, Invista, is
developing more active knowledge management systems that focus on acquiring and sharing
knowledge with value chain members through retention, maintenance, and retrieval.

The results of our research show that differentiation through knowledge is difficult in practice.
Invista has taken the first steps to develop knowledge management systems that connect
the internal and external knowledge base to gain competitive advantage. Establishing
internal knowledge management systems for organizational memory creates opportunities
to minimize knowledge isolation in functional departments and creates a greater base for
tacit learning to be leveraged. External knowledge management systems bring value chain
members closer together and add value to the product (i.e. increased quality, customer
perceptions of brand platforms) throughout the value chain. Active external knowledge
systems create opportunities to reap the full benefits of internal knowledge and knowledge
from other firms within the network. As this knowledge management system develops and
more downstream partners engage, we hope that continued research will help to gain a
more detailed understanding of how business level strategies and knowledge management
systems across the value chain impact firm performance in the textile and apparel industry.

To extend the current research, we are in the process of:

- examining a specific segment of Invista's value-chain (i.e. manufacturers);
- conducting qualitative interviews to assess "state of industry" regarding knowledge
  management systems;
- identifying firms using each level of the knowledge management system; and
- designing a survey instrument and test measures via a pilot study within the textile and
  apparel industry.

An extension of this research could involve an examination of the relationship between
Invista and its downstream clients such as Cintas. Downstream clients have specific fabric
requirements in terms of fabric soil resistance, fabric longevity, breathability, toughness,
ability to withstand multiple cleanings, quicker drying times, etc. By sharing the downstream
partner's customer fabric requirements and creating market back knowledge creation
opportunities for Invista, both companies can benefit from increased product differentiation,
decreased time-to-market, decreased costs and increased product usage which combined
creates increased profitability for both companies.

Many organizations fear that allowing other firms to have an intimate view of their firm will be
detrimental, when in fact the opposite is true. Indeed, access to a company's internal
processes can create opportunities for innovation as partners discover potential synergies
through inputs of various value-chain members. The benefits of external knowledge
management systems discussed above increase concomitantly with the proactivity of
the system. Instead of systems that simply track and fulfill inventory, sophisticated systems can
work to better understand customer needs. As firms are able to better understand customer
needs, they can work to fulfill needs more closely and reap more benefits. Thus, knowledge
management systems engaged across the value chain help to differentiate products from
low cost substitutes and create sustainable competitive advantage for all partners.
References


About the authors

Paula Danskin is Assistant Professor of Management at the Campbell School of Business, Berry College. Her research focuses on knowledge-intensive firms including application in entrepreneurship, technology and knowledge management, and value chain management. Articles based on her research have been published in a number of leading journals, including: Academy of Management Review, Advances in Competitiveness Research, Entrepreneurship Theory & Practice, Family Business Review, International Business Review, Journal of Small Business Management, and Journal of World Business. Dr Danskin has worked with a number of start-up organizations and has served as a consultant to a number of businesses such as Palisades Marketing, Panda Pharmaceuticals, and Underwood Molding.

Basil G. Englis is the Richard Edgerton Professor of Business Administration and Chair of the Department of Marketing in the Campbell School of Business at Berry College. Professor Englis’ research interests focus on consumer behavior, and include consumer psychology, product and brand symbolism, mass media and consumer socialization, political marketing, and consumer lifestyles and values. His research and scholarly work has appeared in more than 50 publications, including numerous articles and book chapters. Englis’s teaching interests and experience include e-commerce marketing strategy, consumer behavior, and strategic marketing. Professor Englis has consulted with numerous organizations concerning consumer behavior, market research and strategic planning including E.I. Du Pont de Nemours, Boies, Schiller & Flexner, LLP, Black & Decker, Vanity Fair Corporation, Moskowitz-Jacobs, Inc., Levi-Strauss, Inc. Dr Englis is Managing Director of Mind/Share, Inc., a firm that specializes in custom online consumer research, and also provides consulting services in the areas of new product development, lifestyle marketing, brand management, trademark litigation, and trend tracking.

Michael R. Solomon is the Human Sciences Professor of Consumer Behavior in the Department of Consumer Affairs, College of Human Sciences, at Auburn University. Prior to joining Auburn in 1995, he was Chairman of the Department of Marketing in the School of Business at Rutgers University, New Brunswick, NJ. Prof. Solomon began his academic career at the Graduate School of Business Administration at New York University, where he also served as Associate Director of NYU’s Institute of Retail Management. He earned B.A. degrees in Psychology and Sociology magna cum laude at Brandeis University in 1977, and a PhD in Social Psychology at The University of North Carolina at Chapel Hill in 1981. He was awarded the Fulbright/FLAD Chair in Market Globalization by The US Fulbright Commission and the Government of Portugal, and in Fall 1996 he served as Distinguished Lecturer in Marketing at The Technical University of Lisbon. Professor Solomon's primary research interests include consumer behavior and lifestyle issues, branding strategy, the symbolic aspects of products, the psychology of fashion, decoration, and image, services marketing and the development of visually-oriented online research methodologies. He has published numerous articles on these and related topics in academic journals, and he has delivered invited lectures on these subjects in the UK, Scandinavia, Australia, and Latin America. His research has been funded by the American Academy of Advertising, the American Marketing Association, US Department of Agriculture, the International Council of Shopping Centers and the US Department of Commerce. Two research projects are currently funded by major multi-year grants from The National Textile Center, US Department of Commerce. He currently sits on the Editorial Boards of the Journal of Consumer Behaviour and the Journal of Retailing, and he serves on the Board of Governors of the Academy of Marketing Science. Professor Solomon has been recognized as one of the 15 most widely-cited scholars in the academic behavioral sciences/fashion literature, and as one of the ten most productive scholars in the field of advertising and marketing communications.

Marla Goldsmith graduated from Berry College with a BS in Business Administration in 2003. She began work on her MBA at Berry in the fall of 2003. She has been doing extensive research on knowledge management in the textile industry with the National Textile Center.

Jennifer Davey graduated from Reinhardt College with a bachelor’s degree in communication in 2003. She is currently an MBA student at the Campbell School of Business, Berry College.