

11-1-2005

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Heather A. Smith

Queen's School of Business, Queen's University, hsmith@business.queensu.ca

James D. McKeen

Queen's School of Business, Queen's University, jmckeen@business.queensu.ca

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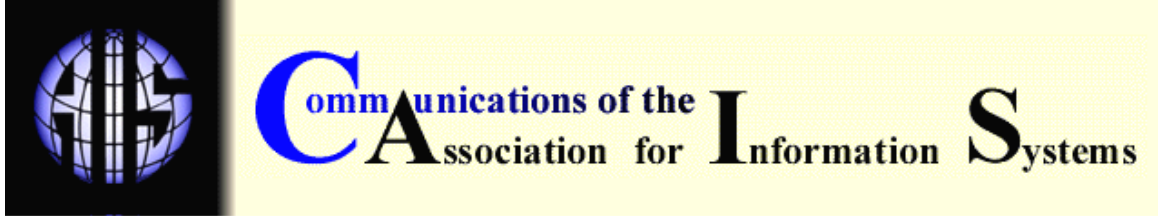
Recommended Citation

Smith, Heather A. and McKeen, James D. (2005) "Developments in Practice XVIII-Customer Knowledge Management: Adding Value for Our Customers," *Communications of the Association for Information Systems*: Vol. 16 , Article 36.

DOI: 10.17705/1CAIS.01636

Available at: <https://aisel.aisnet.org/cais/vol16/iss1/36>

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DEVELOPMENTS IN PRACTICE XVIII - CUSTOMER KNOWLEDGE MANAGEMENT: ADDING VALUE FOR OUR CUSTOMERS

Heather A. Smith
James D. McKeen
Queen's School of Business
Queen's University
hsmith@business.queensu.ca

ABSTRACT

The nature and quality of a firm's dialogue with its customers is a core capability. Few firms are able to manage this dialogue effectively and use what they know to add more value for customers and ultimately improve firm performance. Knowledge management (KM) functions are therefore being asked how their expertise can help companies do a better job in this area. This paper examines the wide variety of ways organizations use KM in their customer relationships. It begins with an examination of the need for Customer Knowledge Management (CKM) and how it differs from Customer Relationship Management (CRM). It then looks at the four different dimensions of customer knowledge and at some of the innovative ways companies use them to add value for their customers. It next discusses the key organizational challenges of implementing CKM. The paper concludes with some best practices and advice about how to implement a program of CKM successfully in an organization. It suggests that CKM is not a tool like CRM but a process that is designed to dynamically capture, create and integrate knowledge about and for customers.

Keywords: Customer knowledge; knowledge management; knowledge co-creation.

I. INTRODUCTION

"For all the technology and tools in use today, all the data capture and all the talk about understanding customers, most companies have yet one more mile to go to truly achieve insight into the behaviour, motivations and...loyalty of their customers. What we need to know is soft, fuzzy and complex. Customers will tell us, if we ask the right questions, engage them in purposeful dialogue and listen."
[Wood, 2003]

To date, most companies are focused on collecting massive amounts of data about their customers. Typically, they use a Customer Relationship Management (CRM) system that captures the functional behaviours of their customers, such as where they shop and what transactions occur. But CRM really only gives them a hard, nuts-and-bolts look at customers and their surface value to the company. Few companies look beyond these basics to improve their understanding of the true drivers of customer loyalty and satisfaction. As a result, they do not use

what they know to understand customers at a deeper level and develop true customer relationships.

The nature and quality of a firm's dialogue with its customers is a core capability. Typically this dialogue is handled through a companies' sales and marketing functions. However, few firms have been able to manage this dialogue effectively and use what they know to add more value for customers and ultimately improve firm performance. Knowledge management (KM) functions are therefore being asked how their expertise can help companies do a better job in this area.

To explore how firms use their KM capabilities to learn more about customers and how they leverage this knowledge to produce value, the authors convened a focus group of practicing knowledge managers from organizations in a number of different industries. In preparation, participants were asked to focus on how their KM function uses knowledge to enhance their firm's customer relationships. They were asked to select a specific project where KM was involved in some aspect of customer knowledge management and to address the following questions:

- How did KM work with other parts of the business?
- What aspects of customer knowledge management were involved?
- Did you use CRM software? If so, how did you integrate this technology with the softer parts of customer knowledge management?
- What were you trying to accomplish for your organization? For your customers?

This paper examines the wide variety of ways organizations use KM in their customer relationships. It begins with an examination of the need for Customer Knowledge Management (CKM) and how it differs from CRM (Section II). It then looks at the four different dimensions of customer knowledge and at some of the innovative ways companies use them to add value for their customers (Section III). Section IV discusses the key organizational challenges of implementing CKM. The paper concludes (Section V) with some best practices and advice about how to implement a program of CKM successfully in an organization.

II. WHY CKM?

Practitioners and researchers agree that building relationships with customers is a critical factor to an organization's success [Wood, 2003; Gibbert et al., 2002; Hanvanach et al., 2003]. One study found that 89% of companies consider customer information to be extremely important to the success of their business [McKeen and Smith, 2003, p.119]. However, how to achieve this goal effectively leads to a thousand answers. Since the mid-1990's, many companies invested significant amounts in CRM systems, which are essentially customer data bases. These systems collect large amounts of data about customers and their transactions to help firms better understand who their customers are. CRM advocates claim these systems improve customer retention and satisfaction by providing improved customer service and more tailored customer service [McKeen and Smith, 2003].

Unfortunately, the majority of CRM implementations are considered failures (80% in one recent study) [Rowley, 2002; Bose and Sugumaran, 2003]. "CRM projects fail because these applications don't serve customers any better and fail to integrate disparate data sources or provide the right kind of information to the right people." [Bose and Sugumaran, 2003]. In short, there is a need for better management of customer knowledge. Thus, clearly this is an area where KM could deliver value to an organization.

Companies need a wide variety of knowledge about customers, such as:

- Who are our customers?
- How can we use knowledge to retain and support them?

- How can knowledge help us acquire new customers?
- How can we use customer knowledge to continuously improve our products and services?
- How can we use customer knowledge to create new products and services?
- How can we use customer knowledge to understand our markets better? [Hanvanach et al., 2003; Rowley, 2002]

A conference on customer knowledge concluded that organizations need *both* technology-based information and other approaches to customer knowledge to address these needs [Wood, 2003]. When used to complement one another, CRM and KM enable companies to build strong, mutually-beneficial relationships with their customers, however they choose to define them. Knowledge management enables CRM to expand from its current “mechanistic, technology-driven, data-oriented approach” towards more holistic, complex and insightful ways of developing and using customer knowledge [Gebert et al., 2003].

CKM is therefore first and foremost a process that integrates technology and KM concepts to help an organization understand its customers as well as serve and learn from them [Gibbert et al, 2002]. Companies may focus on different aspects of this process but it will always contain both strategic and operational elements.

CKM is strategic because it addresses the questions outlined above in ways that support the firm’s overall business strategy. It is operational because it must be implemented in practical, cost-effective ways that support the people, processes and customers who will benefit from improved customer knowledge. Accomplishing these goals involves a systematic approach to eliciting, processing, and sharing knowledge involving customers, and often involves technology (although not always a CRM system) [Desouza and Awazu, 2004].

III. THE FOUR DIMENSIONS OF CKM

Many companies find CKM a difficult concept to grasp [Desouza and Awazu, 2004] and few are doing it well [Gibbert et al, 2002; Davenport et al, 2001]. The two major problems are:

1. We lack a simple framework for understanding it [Bose and Sugumaran, 2003].
2. CKM is defined and implemented in a wide variety of ways and, depending on how it is defined, it overlaps a number of existing functional areas of a company [Rowley, 2002; Desouza and Awazu, 2004; Gebert et al, 2003].

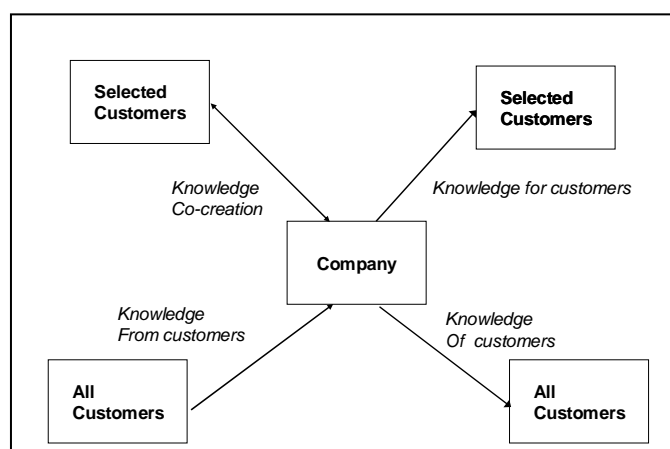


Figure 1. A Conceptual Framework for CKM

The focus group found that organizations recognize four different types of CKM, each of which uses knowledge in a different way (Figure 1). These four dimensions form a conceptual framework within which to understand and position CKM in an organization. No “one size fits all” approach exists for CKM. As the members of the focus group agreed, different organizations apply KM principles to customer relationships in highly diverse ways. In an ideal organization, CKM would involve each of these dimensions, at least to some extent. In practice however,

because of its limited resources, KM is usually involved in only one or two dimensions, leaving other company functions to deal with (or ignore) the remaining ones. However, an effective knowledge manager should understand each conceptual dimension and its relative importance to his/her organization's strategy and operations. He or she will then be able to work with others to design CKM initiatives that will enable the organization "to manage knowledge for high quality relationships in a cost effective way" [Gebert et al, 2003].

Each of the CKM dimensions shown in Figure 1 is discussed below with examples from how the focus group companies implemented them.

1. KNOWLEDGE OF CUSTOMERS.

Knowledge of customers is the domain of traditional CRM systems and data mining. It not only includes basic tombstone data about a customer (e.g., name, contact information), it also includes a record of his/her transactions with the organization, products and services used, and certain personal preferences (e.g., language, method of communication). Many companies use tools that attempt to determine a customer's value to the organization [Reinartz and Kumar, 2002]. Ideally, with this type of knowledge the goal of CKM is to create a

"single unified and comprehensive view of [a] customer's [business] and preferences across all business functions, points of interaction and audiences" [Bose and Sugumaran, 2003].

At a more aggregate level, companies use data mining to understand their customers' demographic and behavioural patterns better and to segment customers into different types.

While most companies started out developing this type of customer knowledge by creating data warehouses or customer information files, few gained many true insights.

"They may know more about their customers but they don't know the customers themselves or how to attract new ones" [Davenport et al., 2001].

To create useful knowledge about customers, companies need more than transaction data. To be *used*, this knowledge must also be integrated across processes, information and technology. Few companies have yet achieved either goal [McKeen and Smith, 2003].

A focus group member noted that a further difficulty with this type of customer knowledge arises because companies often equate learning more about the customer as "I'm going to have a relationship with you so I can tell you more about me." This company-centric view of customer knowledge is common and narrowly circumscribes the value that can be gained from it in several ways.

- It doesn't identify the "almost customer" who may exhibit weak buying patterns because of frustration in doing business with the company, or the marginal customer who may become a high value customer tomorrow [Wood, 2003].
- Little effort is put into understanding what makes a customer unique and tailoring relationships to serve each in his/her preferred way [Massey et al., 2001; Gebert et al, 2003].
- It fails to incorporate contextual and tacit knowledge that can help a company understand the emotional and qualitative drivers of customer-firm interactions [Davenport et al, 2001].

In short, these companies tend to see their customers in functional terms rather than understanding the key drivers of the relationship.

Focus group members were trying to add a KM dimension to this type of customer knowledge in different ways:

- **A Customer Service Workbench (CSW).** This technology-based solution, designed with the assistance of knowledge management, integrates all of the company's business and interactions with its customers from over 75 different systems. The workbench gives every Customer Service Representative the 'big picture' of each customer they deal with. This picture enables the firm to achieve an unprecedented level of customer intimacy and allows the Customer Service Representative to ask intelligent questions that will save the customer effort (e.g., would the customer like to change the address on their health insurance as well as their life insurance?) The workbench also tracks all the company's previous interactions with a particular customer ensuring that whoever deals with him/her in the future has a complete history and status of all items of business. Furthermore, it includes access to images of documents such as forms and letters and provides tips about how to handle different types of requests.

This approach to creating customer knowledge delivered true business value. The company was able to seamlessly manage a 100% increase in its customer base and a 50% increase in its sales force during a recent merger. Productivity improved by 20%; training time was reduced from six months to one month; and cycle times dropped by 25%. In short, by combining knowledge, data, processes, and technology on a just-in-time basis, the Customer Service Workbench brought new levels of flexibility to the business while providing significant customer value.

- **Customer Workrooms.** A different approach to this type of customer knowledge was developed by a consulting firm, whose customers are other companies. To ensure complete customer knowledge in complex engagements, KM develops a customized virtual workroom for each client that is focused around their critical issues. KM takes the time to meet with all parties to understand their issues and design a service model and work flow that meets the individual client's needs. Each workroom contains everything of value in the client relationship: documents, contracts, news and analysis, a threaded workflow, approvals, and letters. Customers may or may not be included in a workroom, depending on how it is designed. "No interactions take place that are not in the workroom," stated the manager. To reinforce this principle, the company claims it will not pay consultants for work that is not documented in the workroom.

Workrooms proved so successful, that demand for new ones increased significantly, said the manager. Her biggest challenge is how to scale this concept up so more customers can be handled in this way. "Because each workroom is uniquely designed for a particular client, it is difficult to achieve the same value with a more generic plan," she says.

- **Global Customer Knowledge.** A third approach to learning about customers was developed when the managers of a pharmaceutical firm realized that many of its largest customers knew more about their business with this company than they did themselves! This knowledge enabled customers to take advantage of their relationship with this company, e.g., buying at different prices in different parts of the world. Knowledge managers worked with the firm's global customer teams to create a platform to support these teams in their interactions with such customers. The finished product was a collaborative workspace and data mart for each customer team. It was a "one-stop shop" for customer-specific information that cut across the company's geographic and product silos and facilitated a more holistic understanding of these customers and their needs.

2. KNOWLEDGE FOR CUSTOMERS.

A second type of customer knowledge includes everything an organization provides to its customers [Gebert et al., 2003]. While traditionally, knowledge for customers focused on

information and expertise about products and services developed by marketing or R&D, more recently, with the advent of e-business, customers are benefiting from a much broader range of company knowledge designed for them. Some of the best exemplars of companies using their knowledge in this way are the big three e-business enterprises: Google, e-Bay and Amazon. Each uses knowledge to make their products and services more intuitive and user-friendly. They apply a combination of three design principles that together form the “essence of creating value from knowledge” [Weiss et al., 2004]:

- One stop access to content, including a streamlined ability to search.
- A consistent format that organizes knowledge the way people actually use it and that allows for growth in the breadth and depth of knowledge.
- Comparative techniques and tools to help customers answer questions (e.g., relevance ratings, quality ratings, snapshots of content).

When these KM principles are incorporated into portals and websites, studies show impact sales directly [Weiss et al., 2004]. Using knowledge to support customers was found to be an important factor in retaining existing customers [Desouza and Awazu, 2004].

Members of the focus group used a number of approaches to apply their companies' knowledge to improve customers' experiences:

- **Proactive benefits.** One organization gave KM the explicit mandate to use its knowledge to benefit customers directly. Thus, company knowledge was used to decrease the time to process customer requests, improve ongoing service, and structure deals better to meet customer needs. Another firm is looking outside its own industry to find out how other industries address problems similar to its own. “By doing this, we hope to learn new approaches that will better serve our customers,” said this focus group member. Using knowledge to benefit customers is not as easy as it sounds, however.

“It’s a big challenge to focus our resources on the customer point of view; we are still oriented very much by products,”... “Our customers’ needs are changing and KM must often proactively step in to ensure that our end clients get the benefit of what we know.” A member of the focus group

- **Access to specialized knowledge.** Subject matter experts in many organizations prepare in-depth papers on topics of interest to a company. Increasingly, firms share some or all of these materials with their customers. In one organization, KM filters out details from these documents and distills key points for their busy clients. In another, subject matter expertise is developed within the organization to ensure that staff can provide counselling for clients that “will give them a step up in their own businesses.” Such specialized knowledge helped make one focus group enterprise a key and trusted information source for clients and governments during a recent health crisis.

“our competitive edge is the specialized knowledge we offer to our customers.... Today, we have more sophisticated customers with more complex problems to solve.” This organization has found that having more knowledge to pass on to its clients gives the company a better image in the community as trusted partners. This, in turn, brings increased business with current customers as well as new clients.
Company manager

- **Integrated information.** KM can also assist customers by connecting internal company information with external information. “Often, we miss an opportunity to serve our customers with what we know,” said a focus group member. “We have a great deal of internal information that simply ‘falls off the table’ before it gets to them.” In this organization, a pharmaceutical company, KM saw that drug information could be better integrated with knowledge about a whole disease and with a patient’s complete needs and not just address the company’s part of it.

"We can better position our product if we help our customers understand where it fits in with all aspects of a disease and how it can be treated (e.g., vitamins, herbs and other medicines). It is critical to our credibility that we are able to step outside of our narrow, product-centred point of view and provide context for our customers," Manager

3. KNOWLEDGE FROM CUSTOMERS.

Customers are a strategic opportunity for companies to learn [Zack, 2003]. "Yet only a few... are managing their most precious resource; the knowledge residing in their customers, as opposed to knowledge about their customers." [Gibbert et al, 2002]. This knowledge is often the domain of customer service or marketing. Understanding what customers know – their experiences with a company, their needs, how a company makes them feel; and the emotional and functional drivers of this relationship – is an important but neglected part of an organization's knowledge [Rowley, 2002; Wood, 2003]. This feedback loop helps companies improve their products and services continually; segment their markets more effectively; develop successful business strategies; and create innovative new products and services [Rowley, 2002].

Ideally, customers should be asked to share both their good and bad experiences with the firm. Studies show that when companies really listen to their customers and take their comments seriously, clients are impressed and feel more loyalty [Gibbert et al., 2002]. What is learned from customers provides economic value if the knowledge is used effectively [Zack, 2003]. However, this knowledge must be integrated into an organization's back end processes to enable managers to act quickly and flexibly [Gebert et al., 2003].

Focus group companies gathered this type of customer knowledge in many different ways including:

- **Visits and meetings with customers.** While not a high-tech or sophisticated application of knowledge, simply facilitating interaction between company staff and their customers can be an extremely effective way to find out what customers know, according to the focus group. One company's communities of practice not only act as a means of disseminating company information to customers, they are also successful in representing their different customers' needs within the company. Unfortunately, such internal customer experts are often overlooked as useful sources of what customers know and want.

"We are more likely to go to third parties for this type of information than our own communities," a manager.

- **A complaint system.** Often, customer feedback is not built properly into company workflows. One focus group company, which is well-known by the public, developed mechanisms for any staff member, regardless of his/her function, to log any customer feedback they receive at any time (e.g., at social events). This system enables the staff member to ensure that complaints are resolved. It also creates action items for specific business functions, provides analytical tools to ensure that similar problems don't recur, and identifies possible business opportunities.
- **An anthropologist.** One focus group company, seeking to get inside the minds of its customers, hired an anthropologist to attend and observe its sales representatives' calls and follow up with customers afterward. This research found that soft customer knowledge, i.e., "knowing where the customer is going", and understanding what kind of relationship a customer wants are keys to sales success. As well, learning what customers think about the company's products – even if it is negative – helps the organization position them better in the marketplace.
- **Monitor customer satisfaction and loyalty.** In addition to standard questionnaires, some focus group companies undertake in-depth interviews with their customers and

account managers. They found that customer satisfaction and loyalty are much more complex constructs than previously assumed. Interviews help companies segment their markets better, understand customer sensitivities, and sense how markets are evolving.

“Companies can get out of synch with their customers. We need to do a better job of scanning our customers and developing a shared understanding of what’s changing.” A manager

- **Ask retirees.** A valuable source of knowledge about customers according to one focus group manager, is retirees.

“We find that they are hugely valuable; they have a vested interest in our company and take no risk in speaking up. In fact, they are flattered to be asked to share their wisdom.”

4. KNOWLEDGE CO-CREATION.

The final dimension of customer knowledge derives from a two-way relationship. As yet, little systematic attention is paid to customers as knowledge development partners [Gibbert et al., 2002]. Here, KM seeks to facilitate interaction between customers and the company around the development of new knowledge, i.e., a product or service. For example, Microsoft shares its “beta-ware” with key customers in order to learn with them.

While many companies believe they listen to their customers’ needs for new products and services, most go about it in the wrong way [Ulwick, 2002; Gibbert et al., 2002; Wood, 2003]. Often, they simply ask their customers what they want. Unfortunately, while customers can relate their experiences and suggest incremental improvements, they don’t know what they don’t know. It is therefore important for companies to discern the difference between what customers articulate and what they are really trying to achieve. As many companies discovered, often what customers say they want is not what they really want. Therefore, true collaboration is important in this type of knowledge development. [Gibbert et al., 2002].

Getting customers to cooperate more effectively and interactively in knowledge co-creation will be one of the biggest challenges facing knowledge managers in the future [Davenport et al., 2001]. Companies involved in this type of CKM should therefore consider the value this process generates for the customer as well as for their own organization. They should ensure that tangible benefits result for customers, e.g., improved satisfaction, personalized products or services, or even monetary compensation [Gibbert et al., 2002].

Few focus group companies were actively involved in this type of CKM. However, many were experimenting with innovative approaches to interacting with customers. Some of these included:

- **Developing front-line KM tools.** One company developed a number of knowledge-focused software tools for analyzing its business. Now, it is working with its communities of practice and its customers, to enhance these tools and introduce them to their customers.
- **Developing communities of customers.** One organization is facilitating communities among its customer groups. This activity led to valuable knowledge about how customers view the company and its products. However, other firms found significant challenges in managing and defining these communities and in capitalizing on the knowledge generated [Rowley, 2002].
- **Develop a community of alumni.** One focus group company created a national program for its alumni, i.e., former employees. “We know that the strength of the relationship is already there with our alumni. We can help them with jobs, services and references. We even give them premium material. In return, they are assisting us in many ways,” explained the manager involved. For example, alumni are an excellent source of “warm leads” for this firm and are also a primary mechanism for recruiting.

SUMMARY

Each of these dimensions of CKM represents a different source of value and a different time frame in which this value is delivered. Knowledge about customers should lead to improvements in the effectiveness and efficiency of internal business processes, e.g., Customer Service Representative productivity, reduced learning curves, and the ability to target products and services better. Knowledge for customers, on the other hand, works by improving customer experiences with a firm, thereby making the firm easier to work with and giving it more credibility in the customer community. Both types of knowledge deliver important short term benefits. Knowledge from customers will deliver value in the medium term by helping a firm make continuous improvements to its products and services over time. Finally, longer-term strategic value comes from knowledge co-creation with customers around developing innovative products and services.

IV. CHALLENGES IN CKM

As with other aspects of KM, the most significant challenges in implementing CKM effectively are organizational, not technical. There was general agreement among focus group members that there are four significant hurdles that must be overcome as part of any program of CKM:

- **Structural Challenges.** Transforming a product-centric organization into a customer-centric organization is easier said than done. “Flipping to a customer point of view affects everything we do,” explained a focus group manager. Even companies that are trying to change may end up becoming customer-focused only by terms that are defined by the company itself rather than from the customer’s point of view [Wood, 2003]. Some of the major reasons organizations face difficulties in this area include:
 - concerns about the profitability of focusing on customers rather than on selling products;
 - poor alignment of rewards and goals with a customer perspective; and
 - business models.

“We must intercept the annual planning process to make headway in this area. This would ensure that we all have the same customer-centric goals and encourage us to help each other.” A manager

Another noted that compensation structures often drive even motivated staff back to a product-centric point of view. A third stated,

“We want to be perceived as one global company, but in reality, we are many different regional companies with hundreds of products and different operating models. We are not good at looking at the big picture and seeing the company as our customers see it.”

- **Cultural Challenges.** Some organizations shy away from customer-centricity because of corporate narcissism, i.e., a sense that “we know better than our customers” [Gibbert et al., 2002]. Furthermore, not all companies want to hear what their customers really think of their products, services, image, and credibility. And companies must be willing to actually change their behaviour towards customers based on what they are told [Peppers et al., 1999]. Finally, in one focus group organization, risk aversion was paramount in the corporate culture. As the manager explained, “risk drives behaviour so we’re not looking at our clients but looking internally”.
- **Competency Challenges.** Organizations need to develop competencies in all aspects of CKM, from understanding who their customers really are and what they want, to designing platforms specifically for customers. Skills and competencies for CKM are different from those designed for internal use [Gibbert et al., 2002]. The focus group agreed it is particularly important for customer processes to cross lines of business.

Information collected from and about customers must be turned into knowledge, disseminated and really used [Bose and Sugumaran, 2003]. As several focus group members made clear, companies do not always take full advantage of the knowledge sources they have – communities of practice, alumni, retirees, and front line workers.

- **Privacy Concerns.** Finally, organizations must understand not only the legal guidelines around how customer data is protected but also how customers feel about what a firm does with their information. For example, too much customization may make some customers feel uncomfortable with what a company knows about them. Since much of CKM is based on developing a trusting relationship with each customer, organizations' privacy policies should take this dimension of privacy into consideration. Privacy is also important even when companies are dealing with other firms, noted the focus group. "We deal with many mergers and acquisitions," said one focus group member. "All our customer information must be locked down and kept highly secure." Another noted the problems that his firm got into simply by tracking who was entering its website for users of a well-known anti-anxiety medication.

V. CRITICAL FACTORS FOR CKM SUCCESS

Given the challenges and the scope of CKM, it is more likely that organizations will evolve slowly towards customer-centricity, rather than completely transforming themselves overnight. Most companies do not yet fully understand the full implications of CKM, nor are they prepared to make the necessary changes. However, organizations can take several fundamental steps to move them closer to a successful CKM program:

- **Envision what could be done.** To help managers better understand how KM could help her organization meet its goals, one focus group manager prepared a one-page graphic illustrating different ways KM could be brought to customers, e.g.,
 - developing communities of practice for customers,
 - developing content for customers,
 - building a platform (website) for customers.

From feedback to this document, KM became more aware of how different business units would like to use customer knowledge.

- **Plan for and manage different types of relationships.** Not all customers are created equal and some organizations may wish to use CKM selectively to serve them in different ways – both because their needs and preferences are different and because their value to the organization is different. Starting with customers with whom the firm enjoys a high value relationships may be a practical way to introduce CKM concepts into an organization, given that companies are usually willing to invest more with these customers. The focus group also made it clear that one organization deals with many different types of "customers" -- companies, individuals, middlemen, retirees, former employees or communities. Each requires a different type of knowledge relationship.
- **Knowledge development.** Once a customer group is identified and an approach selected, a KM manager must determine how best to obtain and present the knowledge needed. In many cases, this begins with simple data collection and ensuring it is consistent and accurate. However, the development of contextual information, designing navigation, integration of information so it can be easily used, and building suitable tools to access and manipulate explicit materials are the key parts of knowledge development. The knowledge manager must also work with the business functions involved and meet with customers to learn where and how tacit or "soft" customer knowledge can be developed and used appropriately.
- **Effective Execution.** Many KM initiatives fail in the implementation. Any project touching end customers is especially sensitive. Therefore, it is essential that time and effort be spent to ensure that a CKM venture is successfully executed both from the customer and the company points of view. Focus group members found that building CKM into normal

workflows and processes are usually the most effective ways to do this because it then becomes the way people work.

- **Measure.** Finally, KM must find ways to demonstrate CKM's effectiveness and value to the organization. Most focus group companies use periodic surveys and tracking opinions, satisfaction, and loyalty over time. However, newer approaches include building in feedback loops so that measurement is more dynamic. These techniques are particularly effective when evaluating online tools. Usage, navigation, and satisfaction metrics as well as customer comments, can be built into these tools and monitored continually, thereby enabling management to be ever more responsive to customers..

VI. CONCLUSION

This paper provides a conceptual framework for understanding and implementing CKM in organizations, illustrating the framework with some of the practices businesses are using in this area. Although every organization defines its customer(s) differently and uses knowledge in its own way to enhance their customer relationships, all organizations seek to do one of four things in CKM:

- develop knowledge about customers;
- use knowledge to support customers and enhance their experience with the firm,
- learn from customers; and
- co-create new knowledge.

CKM is not a tool (like CRM), but a process that is designed to capture, create and integrate knowledge about and for customers dynamically. Thus, organizations need to think differently about themselves and how they are viewed by their customers. The focus group made it clear that companies are just beginning to understand the implications of CKM. Knowledge managers would therefore be well-advised to proceed cautiously. Poorly conceived and executed CKM initiatives could be problematic for organizations in many highly visible ways. Furthermore, the organizational challenges involved in becoming customer-centric are significant. Nevertheless, the work being done in this area by focus group companies is substantive. CKM appears to be one of the areas of KM that is already beginning to deliver tangible value to organizations in the near term.

Editor's Note: This article was received on August 26, 2005 and was published on November __, 2005.

REFERENCES

- Bose, R. and V. Sugumaran (2003). "Application of Knowledge Management Technology in Customer Relationship Management", *Knowledge and Process Management*, (10)1, Jan-Mar, pp. 3-17.
- Davenport, T., J. Harris, and A. Kohli (2001). "How Do They Know Their Customers So Well?", *MIT Sloan Management Review*, (42)2, Winter, pp. 63-73.
- Desouza, K. and Y. Awazu (2004). "Gaining a Competitive Edge from Your Customers", *KM Review*, (7)3, July/August, pp. 12-15.
- Gebert, H., M. Geib, L. Kolbe and W. Brenner (2003). "Knowledge-Enabled Customer Relationship Management: Integrating Customer Relationship Management and Knowledge Management Concepts", *Journal of Knowledge Management*, (7)5, p. 107-123.
- Gibbert, M. M. Leibold, and G. Probst (2002). "Five Styles of Customer Knowledge Management and How Smart Companies Use Them to Create Value", *European Management Journal*, (20)5 October, pp. 459-469.
- Hanvanach, S. C. Droge, and R. Calatone (2002), "Reconceptualizing the Meaning and Domain of Marketing Knowledge", *Journal of Knowledge Management*, (7)4 2002, pp. 124-135.

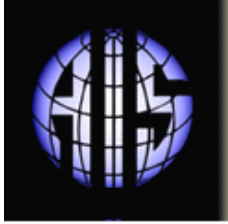
- Massey, A., M. Montoya-Weiss, and K. Holcom (2001). "Re-engineering the Customer Relationship: Leveraging Knowledge Assets at IBM", *Decision Support Systems*, (32)2 December 2001, pp.155-170.
- McKeen, J. and H. Smith (2003). *Making IT Happen: Critical Issues in IT Management*, Chichester: John Wiley and Sons
- Reinartz, W. and V. Kumar (2002). "The Mismanagement of Customer Loyalty", *Harvard Business Review*, (80)7, July , pp. 4-12.
- Rowley, J. (2002) "Eight Questions for Customer Knowledge Management in e-Business", *Journal of Knowledge Management*, (6)5, pp. 500-511.
- Peppers, D., M. Rogers, and B. Dorf (1999). "Is Your Company Ready for One-To-One Marketing?", *Harvard Business Review*, (77)1, January-February, pp. 3-12.
- Ulwick, A. (2002) "Turn Customer Input into Innovation", *Harvard Business Review*, (80)1, January, pp. 5-11.
- Weiss, L., M. Cappelz, and L. Prusak (2004). "Learning from the Internet Giants", *MIT Sloan Management Review*, (45)4, Summer, pp. 79-84.
- Wood, Robert A (2003). "Customer Knowledge Management", *Knowledge Roundtable 2003*, The Monieson Centre, Queen's School of Business, Kingston, Ontario, available at: <http://business.queensu.ca/knowledge/whitepapers/KnowledgeRoundtable2003.pdf>.
- Zack, M. (2003). "Rethinking the Knowledge-Based Organization", *MIT Sloan Management Review*, (44)4, Summer, pp. 67-71.

ABOUT THE AUTHORS

James D. McKeen is Professor of MIS at the School of Business, Queen's University at Kingston, Canada and is the Director of the Monieson Centre – a research centre focused on the study of knowledge in organizations. He received his Ph.D. in Business Administration from the University of Minnesota. His research interests include IT strategy, user participation, the management of IT, and knowledge management in organizations. His research is published in a variety of journals including the *MIS Quarterly*, *JITM*, *CAIS*, the *Journal of Systems and Software*, the *International Journal of Management Reviews*, *Information & Management*, *CACM*, *Computers and Education*, *OMEGA*, *Canadian Journal of Administrative Sciences*, *JMIS*, *KM Review*, and *Database*. He currently serves on the Editorial Board of the *Journal of End User Computing* and was the MIS area editor for the *Canadian Journal of Administrative Sciences* for seven years. Jim and Heather Smith's most recent book: *Making IT Happen: Critical Issues in IT Management* was published in January 2003 by Wiley.

Heather A. Smith is Senior Research Associate with Queen's University School of Business, specializing in IT management issues. A former senior IT manager, she is a founder and co-director (with James McKeen) of the IT Management Forum, the CIO Brief, and the KM Forum, which facilitate inter-organizational learning among senior executives, and co-author (with James McKeen) of *Management Challenges in IS: Successful Strategies and Appropriate Action* (1996). She is also a Research Associate with the Lac Carling Conference on E-Government, the Society for Information Management, and Chair of the IT Excellence Awards University Advisory Council. Her research is published in a variety of journals and books including *CAIS*, *JITM*, *Information and Management*, *Database*, *CIO Canada*, and the *CIO Governments Review*. Her book, *Making IT Happen: Critical Issues in IT Management* with James McKeen was published by Wiley in January 2003 and she is co-author of a new book, *Information Technology and Organizational Transformation: Solving the Management Puzzle* published by Butterworth-Heinemann.

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Communications of the Association for Information Systems

ISSN: 1529-3181

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