

CUSTOMER DEVELOPMENT: A KNOWLEDGE MANAGEMENT PERSPECTIVE AND A CASE ILLUSTRATION IN E-GOVERNMENT

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Abstract

Customer relationship management refers to the ability of a company to build strong relationships with customers as well as develop existing and potential customers to create more loyal and profitable ones, hence securing sustainable market share. As goods and services become more sophisticated and complex, it is necessary for companies to educate their customers about their products, services, and knowledge-intensive offerings. In order for a firm to be able to augment the knowledge of its existing and potential customers, it has to develop ways to effectively and efficiently transfer knowledge to them. Although there have been several studies about supplier development, this study is one of the few address its mirror image, customer development. The main focus of this paper is knowledge transfer that aims at augmenting the absorptive capacity of potentially attractive customers. We propose a framework that outlines the steps that a company could follow to undertake a customer development initiative. Based on a case study of an e-government program from the Arabian Gulf region, this paper illustrates the utility of the framework as a guide in managing such customer development initiatives.

Keywords: Customer development, knowledge transfer, absorptive capacity, supplier development, e-government

1 INTRODUCTION

Knowledge Transfer is a process in which the receiver is affected by the experience of the source (Volkoff et al, 2004; Argote et al., 2000; Szulanski, 1996). During a transfer, knowledge residing in the supplier (source) is conveyed to the customer (receiver) through various methods such as direct personal interaction, information systems, and networks. In addition, the transfer process can either be formal or informal. Formal transfer involves structured procedures and steps for sharing knowledge while informal transfer happens in an unstructured and spontaneous manner. However, the fact that the transfer takes place does not necessarily imply that the knowledge status of the receiver has been augmented. For instance, if one attends a seminar or a lecture, it does not necessarily mean that he or she has successfully absorbed all of the knowledge being presented. Furthermore, the receiver's failure to achieve the desired standard of "knowing" can also be considered as a failure of the knowledge transfer process. This part was explained by Davenport and Prusak (2000) when they spoke of knowledge transfer requiring not only transmission of knowledge, but also absorption and usage. Lane et al. (2001) recognized this aspect and proposed that the abilities to understand and assimilate knowledge are distinct from the ability to apply knowledge. These are knowledge transfer issues that firms must deal with in order to successfully develop the knowledge of their customers and consequently create new and more profitable customers.

Customer development is a relatively new term. It refers to the transfer of knowledge from the seller of the product (supplier) to the buyer (recipient). Consequently, customers become more aware of the seller's product/service as well as how and when it should be used. Thus, they are more likely to demand the product. Still, the effectiveness of the customer development process or initiative may vary depending on such factors as the industry of the supplier, the knowledge intensity of the product and the absorptive capacity of the target customer. Customer development also varies depending on the purpose and stage of the sale. The knowledge transfer process and type of knowledge being transferred may also depend on whether the customer development initiative is carried out before, during, or after the sale. It is also important to consider the objectives of customer development as well as the time and purpose of initiation in addition to considering the processes and strategies taken in order to go through the customer development process. It is crucial to determine the type of knowledge being transferred and whether it is tacit or explicit knowledge. Moreover, the issues of face-to-face vs. electronic transfer must be considered.

Research in the customer development process has concentrated on the marketing aspect of business (Knox, 1998) and focused on Business to Business (B2B) marketing (Peppers & Rogers, 2001). Knox (1998) explained how customer development is greatly related to loyalty management. When loyalty is increased, customers accept development. Meanwhile, Peppers & Rogers (2001) considered customer development as an ongoing change in the way firms manage their relationship with other firms. Yet, none have emphasized the importance of knowledge management, in general, and knowledge transfer, in particular, in the customer development process. Therefore, we identified a research gap when it comes to viewing the knowledge transfer process and its relevance to customer development. Furthermore, the literature doesn't mention knowledge transfer as a strategy towards increasing the customer's absorptive capacity. If knowledge management is emphasized, companies would realize that all customers are not created equal and that there are potentially significant benefits from increasing customers' absorptive capacity (Knox, 1998).

Increasingly, for the purpose of developing their customers, companies are adopting extensive customer knowledge management (CKM) practices (Garcia-Murillo & Annabi, 2002). CKM deals with knowledge for, from and about the customers (Dous, et al., 2005). Our research essentially focuses only on the 'for' customer aspect of CKM. In other words, we focus on the knowledge transferred by the supplier organization to its customers/clients. Therefore, the objective of this paper is to propose a new process of customer development. This is illustrated through the presentation and analysis of a case study of an e-Government initiative in the Arabian Gulf region.

2 BACKGROUND AND LITERATURE REVIEW

Supplier development is "any activity that a buyer undertakes to improve a supplier's performance, and/or capabilities to meet the buyer's short term or long term supply needs" (Handfield et al, 2000). Examples of supplier development may include studying other competing suppliers or even training or working with them directly to improve their respective performance. However, in order for supplier development to be successful, both the supplying and the buying firms must be committed to the process, whether through financial, capital or human resources (Handfield et al, 2000).

Moreover, several studies have indicated that supplier development is a continuous process. This is especially true as each firm must develop its suppliers differently according to their needs and weaknesses. For example, some firms may need technical assistance while others need financial or managerial assistance. Therefore, it is essential to evaluate each supplier individually to create a plan that benefits both firms. Most importantly, effective communication plays a critical role to form this buyer-supplier relationship and enhance the results of supplier development (Krause & Ellram, 1997).

According to Wisner, Leong and Tan (2005), supplier development follows a seven step process: 1) Identify the critical products and services, 2) Identify critical suppliers, 3) Form a cross-

functional team, 4) Meet with the top management of the supplier, 5) Identify key projects, 6) Define details of agreement, 7) Monitor status and modify strategies. Furthermore, customers can develop their suppliers to different extents (basic supplier development, moderate supplier development, advanced supplier development). Nevertheless, studies have found that supplier development in general regardless of its intensity positively affects the buyer's purchasing performance. Companies can help customers through this process to achieve mutual success (Sánchez-Rodríguez et. al., 2005).

Information Technology (IT) has a leveling factor attached to it (Chen & Ching, 2004). Any competitive advantage that arises solely due to IT is easily imitable by competitors. But a knowledge advantage, by contrast, is a sustainable advantage (Davenport & Prusak, 1998). Therefore, the challenge facing today's organizations is to overcome this leveling factor by banking more on knowledge structures that will lead to a less imitable, more sustainable, competitive advantage. Given the importance of knowledge, knowledge management has become an important focus of today's management. There are several definitions of Knowledge Management (KM).

Plessis and Boon (2004) defined KM as "a planned, structured approach to manage the creation, sharing, harvesting and leveraging of knowledge as an organizational asset, to enhance a company's ability, speed and effectiveness in delivering products or services for the benefit of clients, in line with its business strategy." In a more recent article, Yang (2007) defined KM as "a process of collecting and identifying useful information, enabling employees to retrieve organizational knowledge, exploiting and usefully applying knowledge, storing it in a repository, and disseminating it throughout the organization." KM is, then, primarily concerned with the management and exploitation of corporate knowledge and seeks to optimize the utilization of the organization's knowledge resources (Jennifer, 2002). Knowledge that resides within organizations can take different forms. Some researchers (e.g. Davenport & Prusak 1998, Jennifer 2004) have defined tacit and explicit knowledge as two major types of knowledge. Tacit knowledge is defined as complex, developed and embedded knowledge internalized by the knower, or otherwise in the collective organizational memory. Explicit knowledge, on the other hand, is a more structured form of knowledge that can be more easily communicated, shared and stored.

But KM, as defined above, in its traditional sense, deals with knowledge typically being created, transferred and exploited among employees or between companies (Davenport & Prusak, 1998). Limiting KM to only these two players (employees and companies) has resulted in the exclusion of the most important player of an organization's competitiveness – the customer. Sensing this rather apparent void, the term, Customer Knowledge Management (CKM) was coined. Furthermore, KM covers a very broad area. KM spans product and service knowledge, industry knowledge, competitor knowledge, methods and process knowledge, regulatory environment knowledge, and customer knowledge (Plessis & Boon, 2004). Since this paper deals with customer specific KM, CKM is more suitable for our purposes.

In this paper, we consider that the customer development process as a subset of CKM. Customer development initiatives undertaken by companies can be applied to new customers as well as existing customers. Knox (1998) argued that gearing customer development initiatives towards existing customers is far more profitable than using it only to attract new customers. This increase in profitability comes from the increased 'share of spending' of the existing customers. But customer development would not be possible without effectively managing customer knowledge. Customer Knowledge Management (CKM) is concerned with the management and exploitation of customer knowledge (Jennifer, 2002). Customer knowledge can be broken down into three categories (Su et. al., 2006):

- Knowledge 'for' customers: it fulfills the customer's knowledge requirements. It includes knowledge relating to products, services, installation/use, troubleshooting etc.
- Knowledge 'about' customers: it includes knowledge about customer's background, expectations, motivations, preferences etc.

- Knowledge ‘from’ customer: it deals with the knowledge that can be generated through customer interactions. It includes knowledge about customer’s needs, buying patterns and also inferences of the customer’s absorptive capacity.

Developing customer-specific knowledge strategies can often be a tiresome and expensive process. Further complicating the process is the fact that it is the ambiguous, difficult to point, tacit knowledge that is more influential in developing customers (Natti, Halinen, & Hanttu, 2006). Therefore, it is important to differentiate among customers to identify the most promising and profitable ones. Based on the principle that not all customers are created equal, Knox (1998) suggested that the aim of the customer development process is to build relationships with preferred customers who favor the organization’s products and services. Natti et al. (2006) took the discussion even further and proposed the building of Key Account Management (KAM) Systems to ensure that the largest or most important customers are given priority. In short, the customer development process should differentiate between ‘high share’ customers and ‘low share’ customers (Knox, 1998). ‘High share’ customers have a narrow portfolio and are more profitable and loyal. In contrast, ‘low share’ customers have a wide portfolio and are less profitable and loyal. Therefore, ‘high share’ customers are the preferred customers when it comes to undertaking customer development efforts and are better targets for CKM strategies.

3 THE CUSTOMER DEVELOPMENT FRAMEWORK

This paper proposes a customer development framework that aims at increasing customers’ absorptive capacity (see figure 1). It is also important to emphasize that the following framework applies best for business-to-business and other situations where the customer is an organization, rather than an individual (Abu Kobe & Al Noueiri, 2006).¹ It is also important to acknowledge that, in general, the process of customer development is applicable and could be equally profitable in both situations, namely individual and organizational customers.

Step 1: Perform a Customer Assessment

The first step is to form a “Customer Selection and Process Audit” Committee, which will be referred to as the Customer Development (CD) Team. Members of the CD Team should be chosen from different divisions of the organization with diverse backgrounds. Their main responsibilities include: selecting customers to begin the development phase, assess the flow and performance of the customer development initiative, audit every stage and review deliverables. As mentioned earlier, selecting all customers and adding them to the development phase might not be a sound strategy. Organizations should identify and assess customers before embarking on the customer development process. This is the stage for choosing only the “promising/target customers”, those customers that are not expected to be loyal and may switch should not be targeted. Furthermore, assessing the degree of familiarity with each customer is essential. Any preceding involvement regarding relevant development phases or pure business activities are to be reviewed. In addition, the CD Team should carefully choose customers that can be developed in relation to the organizational capabilities. Customers that are expected to have a very low absorptive capacity and would require extensive resources should not be selected or developed. Finally, when prospective customers are selected for development, the CD Team may invite them to begin the “Collaborative Needs Alignment” phase.

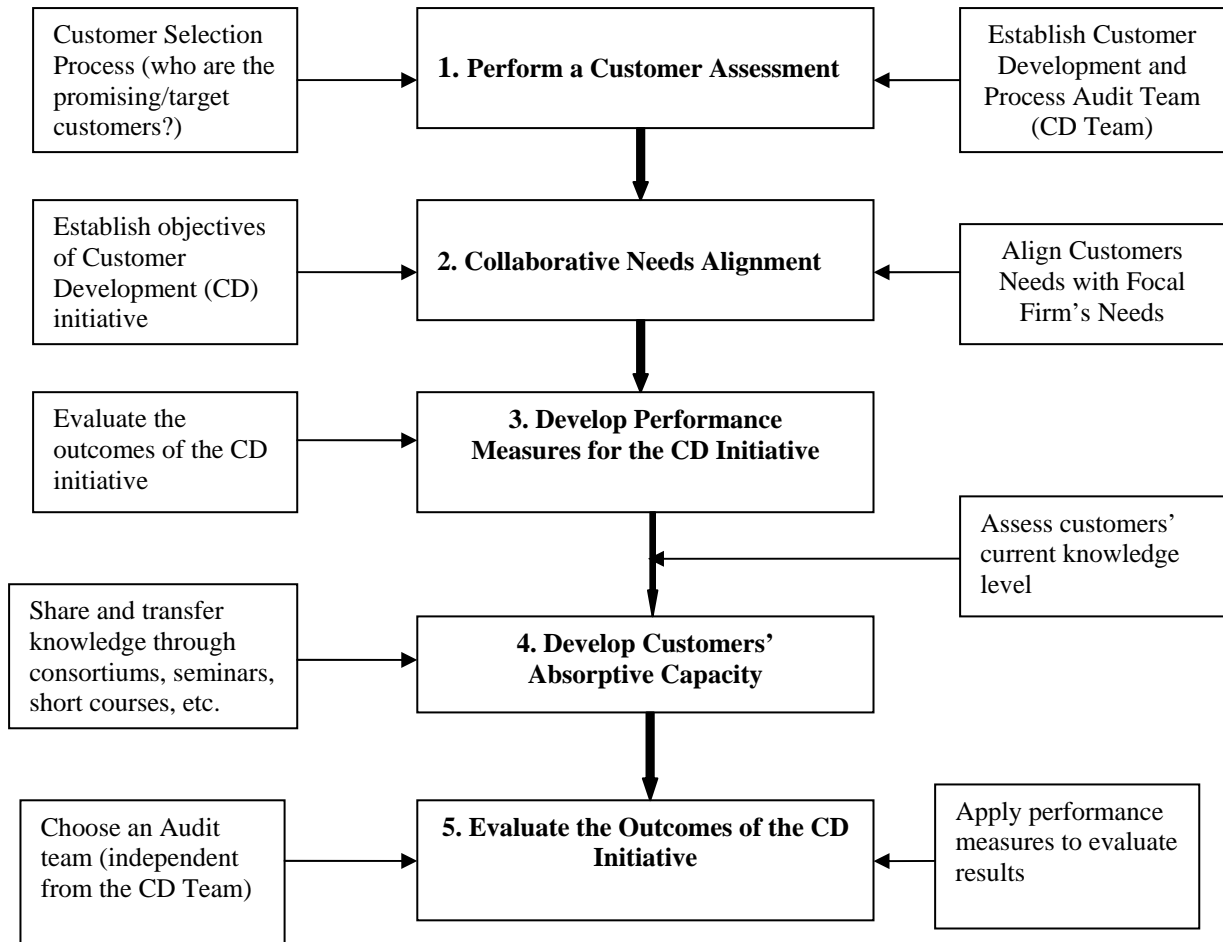


Figure 1. The Customer Development Framework

Step 2: Collaborative Needs Alignment

Customers selected for development are invited to the “Needs Alignment” phase. Developing customers in areas they deem unnecessary would be costly and worse than useless; the same applies to the focal firm. As a result, the CD Team along with representatives from customers should meet to share and align their needs with the organizations accordingly. It would be detrimental if the customer development initiative attempts to increase all aspects of its customers’ absorptive capacity. In such a case, the process would be too long, costly, counterproductive and, ultimately, futile. Therefore, the CD Team should carefully match both sets of needs for this stage to be successful.

Step 3: Develop Performance Measures for the CD Initiative

Phase three requires that both customers and the CD Team develop performance measures and standards to compare with the process outcomes. The standards are to be derived from the goals and objectives defined in the previous phase. Customers may have different goals. Thus, it is essential to understand that these measures are in direct relation to the objectives outlined previously. These measures are to be recorded and measured by the CD Team in following stages.

Step 4: Develop Customers’ Absorptive Capacity

Augmenting customers’ absorptive capacity takes place at this stage. The first step here is to assess customers’ knowledge level, which can be achieved through one-on-one interviews and careful

assessments. These help the cross-functional team learn more about target customers and enhance the chance of improving their absorptive capacity. There are many methods that companies can follow in order to develop customers at this stage. These may include the creation of a “community of practice” or a consortium, in-house training and seminars, and weekly meetings. Consortia are considered essential for these initiatives. It may be difficult for the focal firm to bring together suppliers, customers, and related parties to participate in such projects, but relatively easier if consortia are available. This stage should be under the CD Team’s review and any modifications, disagreements, or trust issues should be resolved immediately. When goals are achieved, the CD Team may move to the next stage.

Step 5: Evaluate the Outcomes of the Customer Development Initiative

This stage reviews the entire initiative. When the CD Team moves to this stage, management must select another team along with customers and suppliers to audit the development process. The CD Team should not interfere with the audit. This is to limit the risk of hiding or manipulating important facts that may show that the customer development process did not achieve its purpose. Performance measures developed at early stages are to be used for the audit and findings prepared carefully to assess results. Finally, when the audit is completed, the CD Team along with the cross-functional team should review results and evaluate whether goals and objectives were achieved. Modifications could, then, be made to improve the entire process for future customer development initiatives.

4 A CASE ILLUSTRATION IN E-GOVERNMENT

In 2001, the e-Government initiative described in this case was designed to provide online services across the spectrum of corporate and community life. The mandate was to integrate individually automated government departments under the single umbrella of the e-Government initiative, thus empowering employees across departments and levels of government. Ultimately, it would support the lives of citizens and customers of the different governmental departments. With its customers ranging from all governmental departments, corporations, and citizens, the e-Government organization was entrusted with a daunting task.

Data collection was carried out in 2005 and included semi-structured interviews with a key executive (the acting director of e-Services) and a key manager (the e-services provisioning officer), as well as a review of published information (Abu Kobe & Al Noueiri, 2006).² The e-Government organization was constantly striving to implement improvements and upgrade its e-Services. They adopted a new, more advanced application platform that would not only elevate the standards of e-Services delivery, but would also raise confidence levels among users. The goal was to further increase existing services by 2007. Although some of these applications focused only on citizens (e.g., e-Jawaz, e-Citizen, and e-Pay), this study focused on the applications directed towards governmental and corporate customers (e.g., e-4all, e-Host, e-Employee, eLearning, e-Jobs, e-Pay and e-Library). As a part of the government’s focus on continuous learning and development, this e-Government organization teamed up with a governmental Executive Council to launch an Institute for Human Resource Development. The institute was a non-profit organization with the mission of providing continuous opportunities for career development and lifelong learning in an effort towards the effective utilization of human resources.

Useful information and insights were also obtained about the process through which the e-Government organization developed the competencies of other governmental agencies. It continuously assessed all governmental agencies in order to screen potential agencies to be developed. Because the assessment criteria were confidential, they could not be listed in this paper, but the criteria did differ from one agency to another. Moreover, the confidentiality of the assessment was important to ensure the effectiveness of the assessment process of whether or not its goals were met.

For the same reasons, the assessment procedure was periodically changed, so that the agencies would not get familiar with the aspects that they were being measured upon.

The assessment process helped in prioritizing the agencies to be developed. Once the promising customers were chosen, a team from the e-Government organization (knowledge provider) and a team from the agency (knowledge recipient) met to clarify the objective of the development process. Those meetings were usually monitored by an auditing team from the Ruler's Court. The governmental agency's goals were usually related to enhancing their employees' competency which allowed for more innovation and creativity, thereby leading to more business transactions and increased performance. Through developing the various governmental agencies, the e-Government organization created more potential future business activity. It had a strong belief that the more an individual knows, the more he/she requires knowledge.

In order to measure the effectiveness of the development process both teams needed to set the standards and performance measures for each process. Measures were set by the teams created through the process of sharing needs. However, they were tightly monitored and modified, when required, by the external auditing team from the Ruler's Court. The performance measures ranged from simple exam grades, for the e-Learning initiative, to complex project portfolios to re-engineer agencies and increase employee productivity. Even the external auditing team enhanced its skills in determining the performance measures for future projects through the recursive cycle of developing different performance measures. They became better in setting optimistic but obtainable goals.

Constantly changing the teams involved in these developing projects negatively affected the compatibility between the developing team (coming from the e-Government organization) and the governmental agency, thus increasing the friction between both parties. Learning the culture and inner workings of each agency took a lot of time, experience, and communication among the parties involved. As a result, to increase efficiency and reduce the time of the development process, the e-Government organization tried to keep the members of a team constant throughout each project involving a particular agency.

Before defining its customers' absorptive capacity, the e-Government organization measured the knowledge of its customers in areas related to the development. This was done through "placement" tests, one-on-one interviews, case problems, and/or observing employees' at work. Next, tutorials, workshops, lectures, seminars and specialized trainings were provided in order to enhance the employees' competencies. Later, the e-Government organization developed an e-Learning initiative that offered more than 3,000 online courses through its portal. Governmental agencies could choose among international certificates and customized packages that best serve their specific needs. Regardless of the method chosen, each employee's supervisor could monitor the progress of the employee. It is perhaps important to point out that most government agencies offered their employees an hour each working day to develop their skills and knowledge through the portal.

Finally, the external auditing committee measured the success of the process through the methods agreed upon by both groups (the e-Government organization and the developed governmental agency). When the performance measures were not met, the recourse was a detailed report sent to the Ruler's Court, which was considered a significant event. If an agency failed one of the e-Government organization's assessments, this did not mean the agency was not to be developed or assessed again. The e-Government organization would send a report to the Ruler's Court, which would then monitor the agency. Once the recommendations were followed, another assessment took place and according to the results, the e-Government organization would once again prioritize the agency relative to other agencies. This process was repeated indefinitely.

Although having the same team members work together on projects that involve a single agency reduced cross-cultural difficulties and increase efficiency, it also increased labor costs. The e-Government organization had to reserve 4-6 employees for each agency. Furthermore, if a group was

assigned to more than one agency, then the e-Government organization suffered in instances of high demand. This was exacerbated by hiring constraints on the e-Government organization. Moreover, no outsourcing was permitted due to the sensitivity of the information and very little overtime was allowed to prevent problems with morale and fatigue. The interviewees also emphasized the benefits of having an independent audit team, which evaluated customer development effectiveness. The audit team was different from the one that monitored the sharing of needs or set performance measures. This ensured the effectiveness, reliability and credibility of the customers' development process. In addition, the needs and performance measures were not to be understated by the auditing committee with the intention of misleading the evaluation and covering up mistakes committed during the development process.

This case analysis showed that the e-Government organization initiative somewhat paralleled the customer development framework presented in figure 1. Indeed, the first four steps were implemented in line with the framework. However, the fifth step (Evaluate the Outcomes of the Customer Development Initiative) was slightly different from the implementation in the case. Instead of completing this step at the end of the development process, the e-Government organization initiative underwent continuous evaluations whereby they conducted their evaluations and audits in parallel with the other steps. This method of evaluation could perhaps be more effective when the focal organization is dealing with sensitive data, as was the case with the e-Government organization. With sensitive data, supplier organizations may be well-advised not to risk keeping their audits until all other steps are complete. Errors and mistakes have to be uncovered as soon as they happen to eliminate them immediately.

Since the e-Government organization is a government agency, access to any confidential information was a significant obstacle. The evaluation and assessment forms could have revealed a lot of information about the first step in the framework. However, the confidentiality of this information was expected due to its role in the customers' evaluation process. Second, the framework depended on discussion-based interviews. This required a lot of time and effort from the interviewees, which was not always possible. In addition, compiling and analyzing the interview findings proved complex because of the complex nature of the subject matter.

5 CONCLUSION

When an organization engages in activities that increase the absorptive capacity of its customers or even potential customers, it is essentially increasing the ability of those customers to accept and incorporate new knowledge. That organization also makes such customers more knowledgeable about its own needs, hence increasing the likelihood of new sales and creating more loyal customers. This paper looked at how supplier development and knowledge management concepts can be used to build the framework for an effective customer development process that focuses on increasing the customers' absorptive capacity and developing those customers for a sustainable competitive advantage. It also addressed the benefits that organizations could reap from such development processes, as well as the key issues that should be considered.

In this paper, we were able to apply the theory learned from the literature to develop a framework and illustrate it through a case. Moreover, another benefit achieved here was discovering that another advantage of customer development for supplier organizations is greater value from customer relationships. If companies develop their customers in a systematic fashion, they would profit more from already established relationships. Future research on customer development could benefit much more from the significant research on supplier development and inter-organizational knowledge transfer. While the proposed framework needs to be refined through further conceptual work and more case studies, empirical investigations are also needed to refine the construct and explore its effects on performance.

Footnotes:

^{1,2} Certain data included herein are derived from an unpublished project that they undertook with one of the co-authors. We are grateful to Mohamed Abu Kobe and Mohamed Al Noueiri for their contributions to some parts of an earlier draft of this paper.

References

- Abu Kobe, M., Al Noueiri, M., and Daghfous, A., 2006. 'Knowledge Supply Chain Management'. Unpublished manuscript. American University of Sharjah.
- Argote, L., and Ingram, P. (2000). Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Organizational Behavior and Human Decision Process*, 82 (1), 150–169.
- Chen, J. S., and Ching, R. K. 2004. 'An Empirical Study of the Relationship of IT Intensity and Organizational Absorptive Capacity on CRM Performance'. *Journal of Global Information Management*, 12(1): 1-17.
- Davenport, T. H., and Prusak, L. 1998. *Working Knowledge*. Boston: Harvard Business School Press.
- Dous, M., Salomann, H., Kolbe, L., and Brenner, W. 2005. 'Knowledge Management Capabilities in CRM: Making Knowledge For, From and About Customers Work'. *Proceedings of the Eleventh Americas Conference on Information Systems, Omaha, NE, USA August 11th – 14th 2005*.
- Garcia-Murillo, M. and Annabi, H. 2002. 'Customer Knowledge Management'. *Journal of the Operational Research Society*, 53: 875-884.
- Handfield, R. B., Krause, D. R., Scannell, T. V., and Monczka, R. M. 2000. 'Avoid the pitfall in supplier development'. *Sloan Management Review*, 41(2).
- Jennifer, R. 2002. 'Eight Questions for Customer Knowledge Management in E-business'. *Journal of Knowledge Management*, 6(5): 500-511.
- Jennifer, R. 2004. 'Partnering Paradigms? Knowledge Management and Relationship Marketing'. *Industrial Management and Data Systems*, 104(2): 149-157.
- Knox, S. 1998. 'Loyalty-Based Segmentation and the Customer Development Process'. *European Management Journal*, 16(6): 729-737.
- Krause, D.R. and Ellram, L. M. 1997. 'Critical Elements of Supplier Development'. *European Journal of Purchasing and Supply Management*, 3(1): 21–31.
- Lane, P. J., Salk, J. E., & Lyles, M. A. (2001). Absorptive Capacity, Learning, and Performance in International Joint Ventures. *Strategic Management Journal*, 22 (12), pp 1139–1161.
- Natti, S., Halinen, A., and Hanttu, N. 2006. 'Customer knowledge transfer and key account management in professional service organizations'. *International Journal of Service Industry Management*, 17(4): 304-319.
- Peppers, D., and Rogers, M. 2001. *One to One B2B*. New York: Doubleday.
- Plessis, M. D., and Boon, J. 2004. 'Knowledge management in eBusiness and customer relationship management: South African case study findings'. *International Journal of Knowledge Management*, 24: 73-86.
- Sánchez-Rodríguez, C., Hemsworth, D., and Martínez-Lorente, R. 2005. 'The effect of supplier development initiatives on purchasing performance: a structural model'. *Supply Chain Management International Journal*, 10(4).
- Su, C., T., Chen, Y., H., and Sha, D. 2006. 'Linking innovative product development with customer knowledge: a data-mining approach'. *Technovation*, 26: 784-795.
- Szulanski, C. (1996). Exploring Internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm. *Strategic Management Journal*, 17 (S2), 27-43.
- Volkoff, O., Elmes, M. B., & Strong, D. M. (2004). Enterprise Systems, Knowledge Transfer and Power Users. *Journal of Strategic Information Systems*, 13, 279–304
- Wisner, J., D., G., Leong, K., and Tan, K., C. 2005. *Principles of Supply Chain Management: A Balanced Approach*. Thomson South Western,
- Yang, J., T. 2007. 'Knowledge sharing: Investigating appropriate leadership roles and collaborative culture'. *Tourism Management*, 28: 530-543.