



Introducing CRM into an academic library

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Abstract

Purpose – This case study was conducted with the purpose of discovering the possible barriers when a customer relationship management (CRM) implementing plan was initiated in the library context, and exploring its efficiency and effectiveness after implementation. The study aims to develop initial hunches or insights and to obtain concrete suggestions for a template to use in future developing and implementing efforts.

Design/methodology/approach – To understand the dynamics present within single, real-life settings during the implementation process, the case study method was adopted.

Findings – The findings highlight the importance to overcome libraries' inexperience in terms of CRM implementation management, and demonstrate that the biggest challenge facing a library is to raise internal awareness of the CRM functions and capabilities that are now provided, and to educate library staff on how these functions and features operate.

Research limitations/implications – The biggest problem of implementing a CRM system in academic libraries is to raise internal awareness of the functions and capabilities that are now provided, to educate library staff on how these functions and features operate, and to clarify the different roles played by the automation system, online reference service and the CRM system.

Practical implications – The initiation into CRM needs not only to address cultural issues, but deal with the fears and anxieties that library staff may have in relation to the adopting the CRM system.

Originality/value – The paper provides useful information for those wanting to implement a CRM system in a library context.

Keywords Customer relations, Customer service management, Academic libraries, Database management systems

Paper type Case study

Introduction

More and more organizations and companies have realized that they need to put their customers front and center, and to support a robust strategic customer care process, including profiling customers, segmenting customers, researching customers, investing in technology, and managing customers (Brown, 2000).

This move toward more customer centric direction can be traced back to the 1960s when the focus of marketing started to shift from managing products or marketing campaigns to managing the profitability of each individual customer over the entire life of the relationship. The paradigm shift brought lots of discussions on "relationship marketing" since the 1980s (Berry, 1983; Håkansson, 1982). Relationship marketing aims to identify, maintain, and build up a network with individual customers and to continuously strengthen the network for the mutual benefit of both sides through interactive, individualized and value-added contacts over a long period of time (Shani and Chalasani, 1992). However, relationship marketing focuses mainly on strategy, and



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lacks a holistic view of the business processes connected to it (Parvatiyar and Sheth, 2000). Customer relationship management (CRM), evolving from business processes, emphasizes not only a comprehensive strategy, but also the process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer (Parvatiyar and Sheth, 2000).

CRM indicates “the strategic process of shaping the interactions between a company and its customers with the goal of maximizing current and lifetime value of customers for the company as well as maximizing satisfaction for customers” (Rajagopal and Sanche, 2005). From the 1990s, CRM became more and more appealing because of two reasons. First, though enterprise resource planning (ERP) software offers a single system “linking all corporate operations, including planning, manufacturing, sales, vendor relations, inventory control, human resources, and accounting” (Handen, 2000), many organizations and companies recognized that ERP systems mainly emphasize on “efficiency” and “control”, and the core attention is still stagnant in the “product” and the “organization”, neglecting the relationship among people.

Second, while companies and organizations are making efforts to keep pace with the paradigm shift in marketing, customer needs, expectations and behaviors are also changing. For example, customers “expect personal service and that their company already know every detail of the relationship they have with their company, regardless of the channel they use to communicate with their company” (Lawless, 2002). Customers do not only want services; they want “good” services, which possess characteristics like “ease of doing business, trust, responsiveness, web site navigability, problem resolution and all those other elements of good e-business that don’t fit quite so neatly into a purely binary world” (Zemke and Connellan, 2001). Javalgi *et al.* (2006, p. 12) also pointed that “in today’s hyper-competitive markets service firms must be market-oriented”. As “knowledge is key to nurturing customer relationships” (Lavender, 2004), “market research plays a critical role in generating the needed data on which a market orientation can be developed and implemented, which, in turn, can enhance the practice of CRM” (Javalgi *et al.*, 2006). Therefore, CRM is considered as a means of supplementing ERP systems to match customers’ needs and increase their satisfaction.

The automation systems utilized in libraries, similar to the ERP in enterprises, mainly deal with the standardized service procedures. Meantime, if a library fails to satisfy user needs/wants, their users will try to look around for something better. If the library can occasionally meet or exceed user standards, users will have a sort of Attention Deficit Disorder (ADD), because libraries give them little or no compelling reason to behave otherwise. In either situation, there will be a decline in the library’s status. The situation in the digital world is for the worse. The consequences of poor services are magnified and instantaneous. Just as pointed out by Zemke and Connellan (2001, p. 12): “treat customers badly just once online, and not only will they never come back, but through chat rooms and broadcast e-mail they will tell potentially thousands of other consumers about their careless attitude”.

Libraries cannot ignore that IT and WWW have offered new possibilities for delivering user service. The “go digital” trend is making library staff feel that it is “a daunting task to keep abreast of the new resources that appear daily on the Internet” (Lipow, 1999). More and more libraries have found that they must use more select

methods and channels to learn what their users want and tailor their services accordingly. This is clearly elaborated by the appearance of such new terms as virtual reference, online reference, e-reference, live chat reference, online real-time reference, virtual community, etc. (Moyo, 2002; Young and Diaz, 1999; Hoag and Cichanowicz, 2001; Flagg, 2001).

Therefore, it is time that libraries consider to adopt more CRM concept and applications as one of the possible solutions to secure users' satisfaction while facing the challenges brought by proliferated information service channels, information explosion, and users' higher expectations. Some libraries, such as University of Malta Library and Lanchester Library, University of Coventry, have used CRM as a framework for developing local services to meet local needs (Broady-Preston *et al.*, 2006).

CRM and libraries

CRM can be defined without any reference to IT or particular information systems implemented, but it is the collective developments of IT and the internet that help to facilitate the realization for more effective customer personalization management. According to the IT employed and the sophistication/integration of the information system used, the CRM development stages can be divided into four stages (Stefanou *et al.*, 2003):

- (1) The first stage: the preliminary, manual, and non-IT-assisted stage.
- (2) The second stage: IT is adopted to assist the predominately manual process (Wells *et al.*, 1999). Spreadsheets, database systems and statistical packages can be used to analyze collected customer-related data.
- (3) The third stage: the IT-automated CRM stage by using a number of technologies, such as the internet and telephone/computer integration.
- (4) The fourth stage: the integrated CRM (i-CRM) stage by employing sophisticated CRM information systems providing highly integrated back-office, front-office and internet functions in order to pursue customer personalization, high level of services and customer satisfaction. In order to dynamically monitor consumer preferences, analysis technologies such as statistical packages, query language, extraction software, data warehouse technology, data mining, collaborative filtering and rules engines may be used (Bradshaw and Brash, 2001).

Libraries have gone through the first stage. Since it is not uncommon for libraries to be web and IT enabled, many libraries are in the second or the third stage. For example, some libraries have designed and promoted their web sites to attract and retain attention and deliver service quality fulfilling user expectations, and used "e-mail, newsgroups, chat rooms, expert forums, message board, FAQs and other user information, and feedback forms" to support "all of library-to-user, user-to-library and user-to-user interaction" (Rowley, 2002). Some have used computer-telephony-integration (CTI) or e-mail response management system (ERMS) to support their service.

Although more and more organizations and companies have "begun to use the Internet to obtain customer information in their database marketing processes to enhance customer relationship management" (O'Leary *et al.*, 2004), very few libraries

have employed sophisticated CRM information systems. In this fourth stage many complicated issues are involved, such as how to store CRM data, where to store the data, how to extract meaningful knowledge from the data, and how to make the “knowledge” easily accessible to the right person in time. The data mentioned here include server log data, data that users submit during a registration process and any other process, data from transactions, and data that can be collected via cookies (Rowley, 2002).

CRM systems can manage and synchronize customer interaction points and communication channels, and these are the collaborative type of CRM systems (Schwede, 2000). In addition to collaborative CRM, the systems can be operational or analytical. The operational type is intended to improve the efficiency of CRM business processes and comprise solutions for automation and customer interaction management. The analytical CRM systems manage and evaluate knowledge about customers for a better understanding of each customer and his or her behavior (Schwede, 2000).

A basic CRM system should allow library staff to post and link useful materials, allow users to make requests and comments to the system, and offer a bi-directional communication channel with their users. A more advanced system should be able to route requests and track the process on course. In addition, data warehouse and data-mining technology may be used to incorporate various data, to extract meaningful pattern, and to profile individual users or some specific users.

One possible scenario to commence the CRM process is illustrated in Figure 1. A user makes an inquiry to the system. After verifying the user status, Library Clerk no. 1

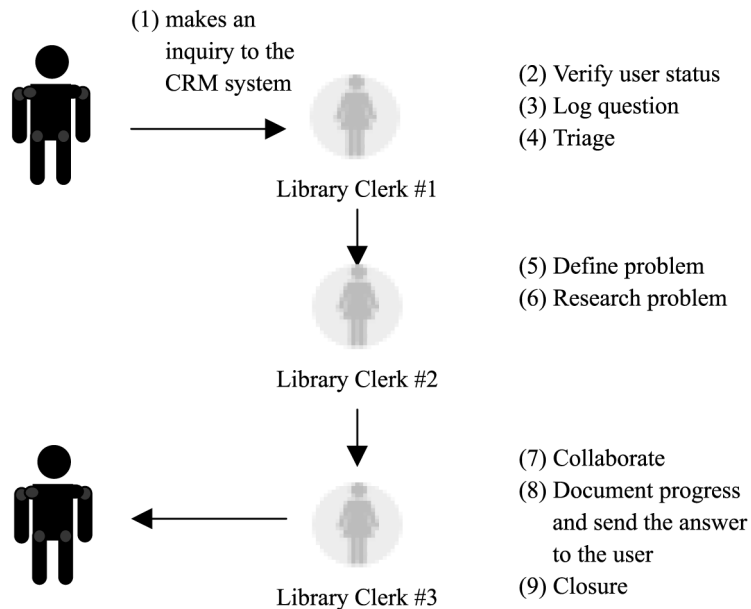


Figure 1.
A process description for
CRM in the library context

Source: Adapted from Bergeron (2002, p. 65)

logs the question, which serves as a basis for follow-up on the user's problem as well as a data point for evaluating the effectiveness of the CRM effort, and then triages the inquiry to Library Clerk no. 2, who is more qualified and available to handle the problem. Library Clerk no. 2 works with the user to clearly define the problem, and researches the problem with Library Clerk no. 3 to find the solution. In this case, it is Library Clerk no. 3 who documents the problem and the progress, posts the answer to the system, and closes the case.

Another simplified example scenario: imagine a librarian discovers that the story-telling time on Wednesdays draws more children and parents than that on Saturdays. She attempts to hold a new series of parental workshops on Wednesdays, but she needs more information in order to market the campaign to the right customer segments and generate their interest in these workshops. Through the bi-directional forum, the library can announce loudly the workshop activity, or send individualized activity notice. The opinions and feedbacks can easily be collected and routed to the library staff in charge.

Research methodology

Seeman and O'Hara (2006) indicated implementing CRM in an academic setting can improve customer data and process management, student loyalty, retention and satisfaction. This paper, thus, presents a case history of a single academic library in Taiwan, to gain an understanding of the recent experiences in introducing and designing a CRM program. The case study method was considered the most suitable research strategy for this study because of the following concerns:

- It can provide an understanding of the dynamics present within single, real-life settings and facilitate the exploration of complex social processes of real-life events with their potentially rich and meaningful characteristics intact (Yin, 1994; Lindgreen, 2001).
- It enables a researcher to pose questions relating to what happened, how things happened and why (Yin, 1994).
- It is particularly useful when the findings need to be referred to implement some changes, plans, programs, etc. (Alloway, 1977).

The chosen library is a small to medium-sized academic library with a hierarchical command structure. This study started from August 2004, and at that time there were two challenges facing the case library. One was the great shortage of human resources for the library service operation. The other was the increasing demands for more proactive, proficient and prompt services. Therefore, the researcher initiated the CRM adoption idea and plan. All the eight library staff were invited to involve in the program from the very beginning, in order to observe and identify causal phenomena associated with their attitude and opinions towards the CRM system. Most of the data for the case stem from in-depth interviews with four anonymous senior staff, including the head of the reader service section, the head of the technical service section, the reference librarian, the librarian in charge of library instruction, and the IT librarian. They were chosen because they made frequent contacts with users, and were able to give opinions about the design of the CRM system.

This paper is intended to reveal the barriers when a CRM system is planned to be implemented in the library context, and to obtain concrete suggestions for a template to

use in future development and implementing efforts. In the next section extracts from the findings are presented.

Discussion of findings

Although the benefits of CRM concept and technological applications have been promoted and emphasized, some surveys reveal the opposite. For example, Gartner Group and others discovered that approximately 70 percent of CRM implementations fail to meet basic company goals due to the lack of executive sponsorship, relying on technology to fix bad business practices, poor system design, unrealistic expectations, lack of sufficient training, etc. (Davis, 2002; Eager, 2002; Gefen and Ridings, 2002).

To sort hype from genuine opportunity, the steps suggested to success were followed (Andersen and Jacobsen, 2000; Eberhardt, 2001):

- accurately assess CRM needs and set precise goal;
- understand customer's value, needs, requirements and behaviors;
- involve all staff affected;
- motivate the staff willing to participate;
- communicate continually with interested parties;
- avoid over-specialized solutions; and
- be critical in choice of methods, tools, equipments, etc.

As mentioned earlier, the researcher tried to invite library staff to get involved, and several problems were discovered during this phase. First, when they were asked to assess CRM needs based on their users' characteristics, their first reaction was resistant. Although most of them did not show their opinion verbally, they were very passive and gave a lackluster performance in analyzing users' behaviors and requirements. Through an indirect communication channel, it was discovered that some of them considered that university library users are less likely to defect while the users are still the students, teachers and staff in the university. Once a user discontinues the relationship with the university, he/she will not bother the library any more. The library staff felt that to identify the differentiation of various users and meet their expectations circumspectly is not the top priority of the library. Later, one librarian argued that "there is no need for CRM implementation because the library already has an automation system and the online reference service". Just as Bose (2002) indicated:

CRM has many similarities with enterprise resource planning (ERP) where ERP can be considered back-office integration and CRM as front-office integration. A notable difference between ERP and CRM is that ERP can be implemented without CRM. However, CRM usually requires access to the back-office data that often happens through an ERP-type integration.

It is important to inform the librarians and the library clerks that the CRM system and the automation system are complementary. The automation system focuses on maximizing operational efficiency and effectiveness while the CRM system aims to add value to the consumer relationship.

One library clerk conceived that it is possible for those users who are hard to please to become even fussier. She said:

[...] the relatively inconvenient library user feedback mechanism can deter demanding users from making more unreasonable requests, but the CRM system will make it easy and quick and thus cause lots of trouble to the library.

She interpreted her point further:

[...] the rest of the library users are either satisfied and pleased with the library services or too reserved to log into the CRM system. Once the CRM system is installed and in use, we will receive more unreasonable requests from these demanding users.

One library clerk is neutral to this matter. She believes that the CRM system can help the library to contribute in customization, and this would definitely upgrade the quality of the library services and boost up the library image. She also mentioned that according to her experience in library user education, it will take a long time for most users and the senior management of the university to recognize the improvement and convince them to learn and use the system.

As the case library lacked the resources to develop their own CRM system, the researcher also partnered with vendors and CRM consultants, especially with the issues relevant to hardware, software and applications. The library staff were dissatisfied with the outcome of the initial consultancy for they felt that the vendors and consultants failed to tell them anything they did not already know. To solve this problem, detailed CRM packages demos were requested.

At the same time, the staff's growing anxiety for possibly an extra workload brought by the CRM system implementation was also noticed. In fact, this may be true because more involvement and commitment to managing their ongoing self-development by taking responsibility for improving their knowledge of the CRM system and building related competencies is required.

Another issue concerned is that there is such a large investment in time and effort involved in setting precise goal, understanding users' needs, devising competency system, and testing and promoting the system. It was known indirectly that some staff questioned that this CRM adoption is just a novelty thing to fit in the buzzword "CRM", and is not cost effective at all.

For all these tacit and explicit opinions, continuous and delicate communication is very important. It was accentuated that "since today library users are versatile and with little loyalty, it is crucial for us [the library staff] not to become complacent, and that we must keep on increasing our users' satisfaction, boosting up our image and position in the university in order to get more support and applaud". About the cost issue, it was explained that "this project, which got a research funding and thus could cover the software fee and installation fee, is a just a trial, and we can make some rearrangements if it is proven wrong or not proper".

The communication efforts did alleviate the library staff's negative attitudes. Gradually, the tones of some staff became more placatory. Two months later one library clerk said that the system might be able to help to point the blind spots and diagnose some faults, and offer an opportunity to identify and manage overall competency levels within the case library. One admitted that the CRM system might become a good tool to provide accurate information to the users at a speedy manner. Another pointed that the system can exert pressure on those who tend to put off their assignments.

With limited resources, an inexpensive and clear-cut CRM solution was sought, and the system that possesses the following features and functions was suggested:

- *Accessible through the web.* Users and library staff can log into the system through the internet.
- *Site customization.* This was to assist users to reach the needed information efficiently. The CRM system is suggested to offer customization features allowing users to filter the content they see, and if possible, the system should also provide customized service. In other words, once a user is registered, he/she will be provided only the information based on his/her profile.
- *DIY services.* Users can choose DIY services, such as help desk/FAQ in addition to submitting an enquiry.
- *A storage repository.* In addition to send to the right user at the right time, all the answers should be stored within a repository for future use and analysis.
- *Search engine.* Allows the visitor to search on keywords to locate quickly specific answers on the web site.
- *Automatic question routing.* A reasoning rule must be set in order to allow the system to route the enquiries to the right librarians and/or library clerks.
- *Mailing list.* To receive more information, the visitor can add his/her e-mail address to a list to receive automated e-mails.
- *Site tour.* The visitor can follow a tour through the web site.
- *Site map.* The system is presented by web pages, so a hierarchical diagram of the site overview and index should be offered.
- *Introduction for first-time users.* Visitors, who enter the site for the first time, should be able to surf to an introduction page, and this requires contains information about how to use the site most efficiently.
- *Chat.* The chat feature allows a visitor to enter a real-time conferencing with librarians, library clerks and/or other users on the web site.
- *Electronic bulletin board.* Script-driven forums allow visitors to share information with others and can help shape a web site to better serve users' needs. Through an electronic bulletin board, a visitor can post a message or can respond to a posted message on a special web page.
- *Alternative channels.* Just like it is not uncommon to find users complaining about e-mail that is never answered and FAQs that raise more questions, this system is not cure-all, and may result into disappointment. As one of the main points of CRM systems is to communicate effectively and efficiently, different ways to contact the library should be offered, for instance, e-mail, fax, toll-free numbers, postal address, call back button and voice over IP, bulletin board.
- *Administer the learning processes of library staff.* The system should be able to examine the status of the learning activities of library staff, assign learning initiatives to them, and generate reports on their learning activities.

Once the above features and functions were proposed, the next phase was to detail the specification. Currently there are no packages that can provide a complete CRM solution. Integration of several different packages or adoption of a specific packet, plus

modification, is a virtual requirement. After several negotiations and demonstrations, a vendor was selected and a package chosen. In addition, the vendor gave their advice on what types of modifications that may be required, and was asked to provide a range of additional services including installation and minor configurations.

Conclusion

This case study highlights the importance to overcome the inexperience in terms of CRM implementation management in academic libraries, the need to recognize the problems in organizational communication as well as to acquire expertise in external consultancy sourcing due to the lack of certain competencies in certain areas. Actually, the decision to seek outsourcing consultancy did help the case library to acquire more knowledge and support than that were achieved by working alone in-house.

The case findings also demonstrate that the biggest problem of implementing a CRM system in academic libraries is to raise internal awareness of the functions and capabilities that are now provided, to educate library staff on how these functions and features operate, and to clarify the different roles played by the automation system, online reference service and the CRM system. The initiation into CRM needs to address cultural issues, as well as dealing with the fears and anxieties that library staff may have in relation to the use of the system. Introducing and promoting the CRM concept and implementation can be a lengthy process. Therefore, all of the participating library staff should be encouraged and rewarded to make them feel engaged and empowered.

Because of the limited resources, the case library was unable to get the most appropriate and competitive solution. Meantime, as there were no other previous adopters to be followed, the library was unable to observe the similar system working in another library setting. Such pitfalls did result in compromises in the functionality of the system.

Since the aim of the case study research cannot be to conclude universal findings from a sample to a population but rather to understand and express patterns and linkages of theoretical importance (Remenyi *et al.*, 1998), and there is a lack of CRM empirical studies within the academic library context, it is suggested that more relevant empirical research should be conducted to identify the extent of such issues.

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