A STRATEGIC ANALYSIS OF ELOQUENT SYSTEMS

by

Nilesh Parab
PGDBA, Welingkar Institute of Management, 1996
GRAD (IIIE), Indian Institution of Industrial Engineering, 1995

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF BUSINESS ADMINISTRATION

In the
Faculty
of
Business Administration
(MBA-MOT Program)

© Nilesh Parab 2004

SIMON FRASER UNIVERSITY

Fall 2004

APPROVAL

Name: **Nilesh Parab**

Degree: **Master of Business Administration**

Title of Project: **A Strategic Analysis of Eloquent Systems**

Examining Committee:

Jill Shepherd
Senior Supervisor
Assistant Professor
Faculty of Business Administration

Richard Smith
Supervisor
Associate Professor
School of Communication

Date Approved: _Dec. 7/04_

SIMON FRASER UNIVERSITY

PARTIAL COPYRIGHT LICENCE

SIMON FRASER UNIVERSITY

Ethics Approval

The author, whose name appears on the title page of this work, has obtained human research ethics approval from the Simon Fraser University O ffice o f R esearch E thics f or t he r esearch d escribed i n t his work, or has conducted the research as a co-investigator of a project, or member of a course, approved by the Ethics Office.

A copy of the human research ethics approval letter has been filed at the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for ethics approval and letter of approval is filed with the Office of Research Ethics. Inquiries may be directed to that Office.

W. A. C. Bennett Library
Simon Fraser University
Burnaby, BC, Canada

ABSTRACT

Eloquent develops software for library, records, archives, and collections management. Circa 2002, it developed web-enabled software products (WebLibrary, WebRecords, WebArchives, and WebMuseum), and since then targeted its existing DOS-based customers. Now, it plans to target new customers with a low-investment marketing strategy.

The library management software industry is saturated with many big and niche players. The records management software industry is expected to grow exponentially due to the recent enactment of the Sarbanes Oxley Act in the United States. The archives and collections management software industries are relatively stable with reasonable level of competition.

Considering competition, industry growth, and product strengths, Eloquent should focus on two products: WebLibrary targeted at schools and WebArchives targeted at government archival institutions. It should use direct emails to make itself visible in the marketplace. However, rather than sending spam messages, it should build its own database of potential customers using advertisements and its website.

To my wife,

Smruti

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LISTS OF FIGURES AND TABLES

1 INTRODUCTION TO ELOQUENT SYSTEMS AND THE PROJECT

This chapter introduces Eloquent Systems Inc., (Eloquent). It outlines Eloquent's history—how Eloquent devolved over the past 25 years—and explains Eloquent's products and services. Lastly, the chapter details the aim, scope, and main structure of the project.

1.1 History

Mervin Richter, a first generation entrepreneur, founded Easy Data Inc. in British Columbia, Canada, in 1975. This company developed software applications for hotel management, cost accounting for oilrigs, and library management. These applications were developed to run on then popular Datapoint minicomputers. The company achieved international recognition by selling its library management application to the research libraries of reputed companies such as Exxon, Chevron, and Tenneco. In the early 80s, Mr. Richter sold Easy Data to a public company and renamed his private company Eloquent Systems Inc.

As the market for personal computers boomed, Eloquent focused its efforts on developing software for personal computers. Initially, it developed GENCAT, a DOS-based generic cataloguing software, using object-oriented design concepts. It then used GENCAT as a foundation to develop software applications for four fields: library management, records management, archives management, and collections management. Although Eloquent sold more than one thousand licences of these applications all over the world, its primary market was North America. Most customers were satisfied with Eloquent's products and customer support.

In the early 90s, the Windows operating system emerged as a popular operating system. But Eloquent did not develop its application for Windows in a reasonable time frame. This led

some of its customers to move to Windows-based software from other vendors. In mid 90s, Eloquent developed WinGENCAT to enable its GENCAT applications to run on Windows; however, it was late in its product release and lost many existing and potential customers.

In the late 90s, the IT industry experienced the boom of E-commerce and web-enabled applications. Circa 1999, Eloquent decided to discontinue the sale of all its legacy DOS and Windows products and to replace them with web-enabled products. It then developed WebGENCAT, a web-enabled version of GENCAT, using the latest tools and technologies such as jBASE, Java, and XML. Between 2000 and 2002, Eloquent rebuilt its products using WebGENCAT to extend the benefits offered by the Internet to its customers. However, rather than targeting new customers with these products, Eloquent pursued its existing customers of DOS-based products to switch over to these new products. By indicating that it would stop the service and maintenance of its DOS-based products in the near future as well as by regular follow-up, Eloquent successfully moved many of its customers to its web-based products.

1.2 Products and Services

Eloquent now offers web-enabled software products for four applications: library management (WebLibrary), records management (WebRecords), archives management (WebArchives), and collections management (WebMuseum). All of these products are tightly integrated. Thus, a customer who needs more than one application can benefit from features such as cross table searches.

Eloquent also sells WebGENCAT, which is the foundation of these products. WebGENCAT has two components: an application server component and a development component. The application server component is essential to run each of the four products and must be purchased by the customer. The development component is a rapid application development tool that can be used by a customer to develop its own application. Most customers

purchase one or more Eloquent's products and ask Eloquent to customize it to suit their requirements. Some may later purchase the development component to make ongoing enhancements. Figure 1 illustrates the main components of Eloquent's applications.

Figure 1   Eloquent's Products
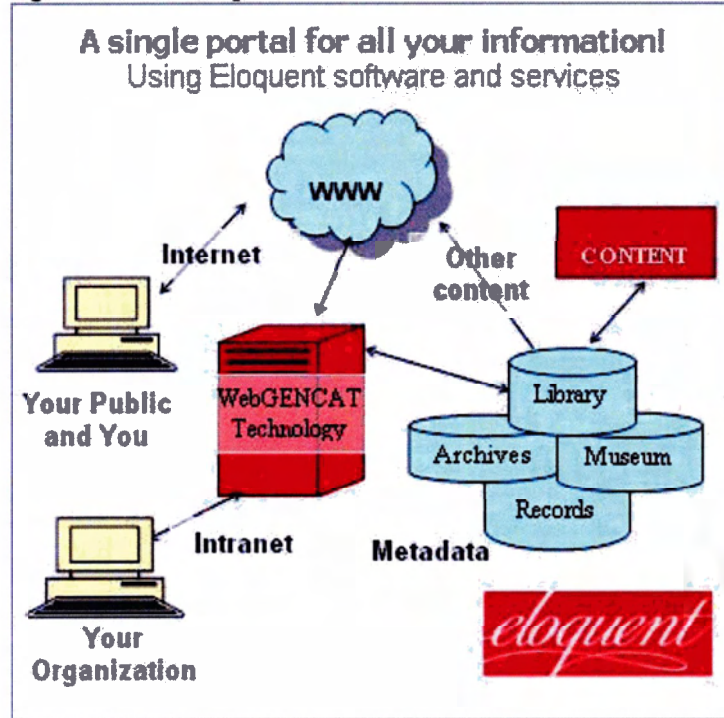
© Eloquent Systems Inc., 2004 (by permission).

Apart from selling software, Eloquent is also an application service provider (ASP) that offers to host customer's application on its own server. By eliminating the need to host the application in the customer's premises, Eloquent expects to attract small organizations with low IT budgets as well as big organizations interested in outsourcing these applications. Also, since September 2003 Eloquent hosts a user forum where customers can share their knowledge and experience of products and seek solutions to their problems. Currently more than 50 customers have registered but the forum is rarely used, as customers find direct communication with Eloquent more effective.

1.3 Project Aim and Scope

In the past 20 years, Eloquent has moved from the mini computer market to the PC market, and then from DOS to Windows and now to web-enabled solutions. Its products are based on proven technologies and provide most of the common functionalities required by a typical customer. With many customers in North America, Eloquent's products are competitive.

Eloquent has not targeted new customers in the past three years. A depleting customer base coupled with increased competition over the past decade has put Eloquent's revenues under pressure. Limited financial resources are affecting Eloquent in three ways. First, they limit the ability to attract and retain the best industry talent. Second, they delay the enhancements and matching the features of competing products. Third, they restrict sales and marketing efforts to attract new customers. In addition, Eloquent has been following a low-risk strategy, especially since its late reaction to the development of Windows-based applications. For a small private company like Eloquent low-risk strategies with minimal capital investments may be reasonable in the volatile IT market.

Thus, this project derives a low-risk, low-investment marketing strategy that is aimed at making Eloquent more visible in the market and which can be executed in the medium term. The project identifies the market segments and the products Eloquent should focus on. It also identifies Eloquent's competitors in North America.

To achieve the objective of deriving an appropriate strategy, first, Eloquent's external environment is analysed. This analysis includes understanding the market and industry structure and identifying Eloquent's competitors. Next, an internal analysis is put forward to examine Eloquent's organization structure, customer profile, revenue model, and resources and competencies. Based on the core problems surfaced from both the internal and external analyses, various alternative marketing strategies for Eloquent are suggested. Lastly, these strategies are compared and the best strategy is recommended along with its associated managerial challenges.

2 EXTERNAL ANALYSIS OF ELOQUENT

To devise an effective strategy for Eloquent, it is essential to first understand what is required to succeed in each of the industries Eloquent competes within and the current state of these industries. Hence, this chapter describes the library management software industry, the records management software industry, the archives management software industry, and the collections management software industry. The chapter begins with the methodology followed to identify Eloquent's main competitors in North America. It then appraises the four industries based on users, standards, key players, and trends. The chapter concludes by identifying Eloquent's competitors across the product spectrum and in each industry.

2.1 Methodology

This external analysis is primarily based on online research. To identify the players in each industry in the North American market, pre-compiled lists of vendors from various sources are used as a starting point. Thus, for collections management software, a vendors' list from the website of Canadian Heritage Information Network (CHIN), a special operating agency of the Department of Canadian Heritage, is used. For records management software, a vendors' list from the website of New York State Archives is used. A pre-compiled list is not available for archives management software vendors, and hence a list is prepared by querying a popular search engine. For library management software, vendors' lists from the online directory of Yahoo! Canada and the website of Internet Library for Librarians are used.

To confirm whether each vendor from these lists has a competitive product, each vendor's website was visited and brief information about the company and product was collected. Then the vendors that either offer unrelated products or do not compete in North American

market are eliminated. Not only did this help in getting a feel for these industries but it also eliminated consulting companies, hardware companies, and companies with complementary products and services such as document and data compression software or records storage facility. The vendors having competing products but missing from the original lists were then appended. However, the vendors were not contacted before elimination to confirm they should be excluded. Also, there is a possibility that some vendors with competing products are not considered in this analysis because they did not appear in the original lists. Nevertheless, the method given the available time should be considered as relatively robust. What follows is a review of each industry conducted using the above methodology.

2.2 Library Management Software Industry

Library management software is used to automate libraries and thus to improve their operational efficiency and quality of service. With advances in information technology, library management has become sophisticated as well as complex. Today's library management software provides features such as online public access catalogue (OPAC), bookings through the Internet, automated phone and email notification, linking multiple branches, and searching the resources of other libraries and information databases.

2.2.1 Users

The primary users of library management software are academic institutions (schools and universities) and public libraries. Other sizable users include corporate and government libraries and special libraries such as medical and legal.

2.2.2 Standards

MARC (MAchine Readable Cataloguing) and Z39.50 are two key standards in this industry. MARC, developed by the Library of Congress, is a standard used to store, retrieve, and

edit bibliographic information in electronic format (The Library of Congress). Z39.50 is an ANSI standard that enables a library to search and retrieve electronic information from other Z39.50-compliant libraries and professional information databases irrespective of their software and search syntax (Sirsi Corporation).

2.2.3 Major Players

Appendix A shows 35 players who offer library management software in North America. Most of them offer software for many types of libraries. For example, Innovative Interfaces and Sirsi sell their software to all kinds of libraries such as academic, school, public and special libraries. On the other hand, some vendors specialize in a specific library. For example, Dynix, New Generation technologies, and The Library Corporation target public libraries whereas Inmagic, Minisis, and EOS International compete for corporate and government libraries.

Some vendors sell off-the-shelf library automation software, whereas some sell their software in modules that can be customized and seamlessly integrated to suit the requirements of any given library. Some vendors offer ASP services to attract the low-budget libraries.

2.2.4 Trends

The library management systems have adopted the advances in ICT such as use of bar coding or online cataloguing. RFID (Radio Frequency IDentification) is the new trend that will affect library automation. With the decreasing cost of this technology, libraries will soon find RFID tags more economical and beneficial than bar coding which will result in the replacement of bar codes with RFID tags. This will require library management software to support check in and check out as well as the tracking of library materials using RFID.

Open source software products for library automation are growing. Numerous open source software products are available for download at no cost on the website of open source systems for libraries. Examples include Koha, Avanti MicroLCS, and MyLibrary (The oss4lib

Community). All of these software programs may not support MARC and Z39.50 standards. Nonetheless, they may be good enough for small- to medium-sized libraries with limited budgets. However, a library needs to be careful while implementing an open source software project, which may be more frustrating than a proprietary software project due to lack of customer support and appropriate documentation. Open source should only be used if a library has capable IT people to carefully select and implement such a system.

2.2.5 Analytical Insights

Although the open source community is growing gradually, open source applications for library management are far from becoming popular in the near future. Thus, current open source software products do not pose a real threat to Eloquent—at least for the next 2-3 years.

Most library management software products offer nearly all the features required by a typical customer. Thus, apart from the total cost of ownership, a library's decision depends on qualitative attributes such as ease of use—for both patrons and librarians—and an engaging user interface. Hence, before finalizing its purchasing decision, a library evaluates the software by using it during a trial period.

Often a library also refers to other similar libraries. Thus, a public library, for example, will most likely choose the software used by other similar public libraries. This gives a competitive advantage to a library software vendor that has a critical mass due to a large number of installed sites. For example, with 2,300 installed sites of public libraries, New Generation Technologies would find it easier to sell its software to other public libraries. Similarly, Sagebrush Corporation, which has more than 30,000 installed sites in schools, would find it easier to sell its software to other school libraries. (Cibbarelli 8)

2.3 Records Management Software Industry

Records management software is used to manage the entire life cycle of records. Records can be documents, photographs, maps, books, drawings, etc. and may be in physical (paper) or electronic form. During their life cycle, records are classified as active (regularly used in the current business and maintained at their place of origin), semi-active (infrequently used and may be transferred to a records centre), and inactive (no longer required for current business and can be archived or destroyed) (Simon Fraser University). Thus, as the value of the information in records declines, they are either disposed off or kept in retention for a defined period of time before disposal. Those records that have enduring value are archived permanently.

By and large, records management focuses on maintaining evidence of events related to statutory, regulatory, fiscal, operational, or historic activities. The objective of a record manager is to keep only necessary records for a specified length of time such that compliance costs are reduced while mitigating the risk of non-compliance. Records management software helps in automating the file plan, marking a document as record, storing and keeping track of active and semi-active records, and retaining and disposing inactive records. A good records management system must prevent accidental loss or deliberate tampering of electronic documents and records to maintain the evidential value (Tessella).

2.3.1 Users

Records management software is primarily used by industry—both public and private companies—and governments. Academic institutions such as schools and universities also manage a significant number of records and hence utilize records management software.

2.3.2 Standards

There are two important standards in records management—DoD 5015.2 and Sarbanes Oxley Act.

2.3.2.1 DoD 5015.2

Over the past few years, DoD 5015.2 standard has become a de facto standard for the entire records management industry. Developed by the United States Department of Defence, primarily for its Record Management Application (RMA) software, DoD 5015.2 sets forth mandatory and optional baseline functional requirements for RMA software. It also describes the minimum records management requirements that must be met based on current National Archives and Records Administration (NARA) regulations. (Defense Technical Information Center 23) Although DoD 5015.2 is mandatory only for the Department of Defence components, over time most federal government organizations that manage classified records and documents have adopted DoD 5015.2.

2.3.2.2 Sarbanes Oxley Act

The U.S. Public Company Accounting Reform and Investor Protection Act of 2002, also known as the Sarbanes Oxley Act of 2002 (SOX), was enacted due to the financial scandals of companies such as Enron and WorldCom. The act seeks to protect investors of public companies by improving the accuracy and reliability of corporate disclosures. The act also imposes fines and prison sentences of up to 20 years for knowingly altering and destroying a record with the intention of obstructing the investigation.

SOX does not specify how to store records nor does it directly regulate the information technology. However, it does regulate business processes and defines which records must be stored and for how long. It also demands a company to maintain records internal control reports and complaints received from employees about accounting and auditing practices (The American Institute of Certified Public Accountants). It requires auditors of public companies to retain a broader scope of audit-related documents rather than just the final documents; auditors are therefore expected to seek more information, which may be in different forms such as letters, emails, and documents.

In short, SOX directly affects current record management practices of the industry and most companies have already taken steps to comply with SOX. Although SOX is mainly for public companies, private companies have also taken a note of it for their internal accounting, governance and record management practices.

2.3.3   Major Players

Appendix B lists 25 players who offer records management software in North America. Of these 25 players, vendors with DOD-certified products are shown in Table 1.

Table 1   DoD 5015.2 Certified Records Management Software Products

Product	Company
Accutrac	Accutrac Software, Inc.
Records Manager	Documentum, Inc.
Laserfiche Records Management Edition	LaserFiche
FileSurf	MDY Advanced Technologies, Inc.
ViewDirect Records Management	Mobius Management Systems, Inc.
Livelink Records Server	Open Text Corporation
Stellent Records Management	Stellent, Inc.
TRIM Context	TOWER Software
Versatile	Zasio Enterprises, Inc.

See Bibliography for website sources

2.3.4   Trends

After the Enron and WorldCom fiascos, the entire industry has become cautious of records management. Since the DoD standard is more demanding than the general regulations, DoD 5015.2 certified records management software is considered to meet rigorous requirements for systematic records management as required for regulatory and legal compliance (Laserfiche). Hence, the industry is now expected to choose DoD 5015.2 certified records management software.

Increasing convergence of the market is taking place in this industry. With the increase in electronic documents, many companies, especially medium- to large-sized public companies, require both electronic document management and electronic record management software. They

also prefer to link these two systems. Since many functions of electronic document management and electronic record management are common, few medium and large players in the records management industry are offering integrated solutions for records management and document management.

2.3.5 Analytical Insights

SOX is expected to be a structural driver of change and will affect the entire industry in the near future. Post-SOX, organizations have realized that they will incur heavy legal costs if they fail to manage their records and to produce them when required. SOX will affect the records management software industry in two ways. First, it will increase the size of records management software market, as the companies that used to disregard records management will now purchase the records management software. Second, records management will become a critical IT function—at least for the industry segment.

Also, the vendors who offer a "total" solution by integrating record and document management, especially with DoD 5015.2-compliant records management software, will have a competitive advantage over the vendors offering only record management software. Furthermore, ERP vendors may incorporate record management features in their applications; some will develop this in-house while some will collaborate with existing record management software vendors.

2.4 Archives Management Software Industry

Archives management software is used to manage archives. Archives are inactive or non-current records but considered valuable and worthy of permanent retention. The majority of the business records are usually destroyed once it is ascertained that the evidence they contain is no longer required. However, there would be many records that an organization would like to retain permanently for their administrative, legal, financial, or historical value.

Thus, archives management starts where records management ends. Archives management software keeps track of archives, enables researchers to search the archives database, and makes available electronic archives via the Internet.

2.4.1 Users

Ideally, archives management software is required by all the users of records management software, simply because there will be some records that an organization would like to retain permanently. Thus, public and private companies, governments, and academic institutions are all potential users, but governments, especially archival institutions, are the major customers of archives management software.

2.4.2 Standards

There are two main standards in archival description. EAD (Encoded Archival Description) and RAD (Rules for Archival Description). Both these standards contain rules for storing archival information so that archival records can be searched and displayed. There are many similarities and differences within these standards, but a vital point is that the archivists in the United States use the former, whereas their Canadian counterparts use the later.

2.4.2.1 EAD

EAD is supported by the Society of American Archivists (SAA) and the Library of Congress. It was created based on the American practice of archival and its primary aim is to gain universal access to archives through the Internet. Undoubtedly, it is the preferred standard with American archivists. EAD emphasises on the structure of archival descriptions and uses SGML / XML to nest the data elements of an archival description.

2.4.2.2 RAD

RAD is maintained by the Bureau of Canadian Archivists in cooperation with the

Canadian Councils of Archives. It is based on traditional archival principles rather than the

system analysis approach of EAD to gain universal access. (The society of American Archivists)

(University of British Columbia)

2.4.3 Major Players

Appendix C shows 5 players who offer archives management software in North America.

All these players apart from Minisis offer records management software too.

2.4.4 Trends

Due to the increasing use of electronic records, the complexity of archives management

has increased manifold in the past decade than in the past century. The challenge faced by an

archivist is to manage not only electronic records but also the software used for creation of those

records. As the average lifespan of typical software is 2-5 years, one cannot assume that a

document created by today's popular software can be accessed in the next decade by the

prevailing software at that time. So, an archivist has to preserve the metadata about a record such

as software, version, operating system, etc. and a copy of the software used to create that record

(Hebbard). Once the leading archives management agencies standardise a methodology to

overcome this problem, archives management software vendors will need to incorporate it in their

software.

2.4.5 Analytical Insights

For commercial organizations with profit motives, the archives that do not have any

financial or legal value are overheads. Most organizations do not need complex software to

manage their archives if they are not accessed by external researchers. Simple software developed

in-house can serve this purpose. Given that the industry sector is not very keen, the market for archives management software is much smaller than the market for records management software. However, as governments have social obligations to preserve and share historic records, it continues to be a major market segment for archives management software.

2.5 Collections Management Software Industry

Collections management software helps an organization—typically a museum or an art gallery—in collecting and displaying objects that have scientific, artistic, or historical value. It provides functions such as acquisition, location and movement, loans, inventory management, conservation, exhibits management, insurance and valuation, and deaccession and disposal control.

2.5.1 Users

Museums and art galleries primarily use collections management software. However, any organization that collects artefacts and objects may require collections management software. Thus, universities, government organizations, and corporations that have existed for many years could be potential users.

2.5.2 Standards

Museums often use metadata standards, cataloguing standards, and value standards. They also use interchange standards (mainly Z39.50 used by libraries) to search and interchange collection information among several museums and art galleries.

The Canadian Heritage Information Network (CHIN) helps museums and art galleries automate their collections management and achieve online presence. It assesses, in detail, various collections management software and certifies successful software. Thus, CHIN itself is not a

standard but its certification assures that the certified software supports critical functionality and thereby meets CHIN and international standards.

2.5.3 Major Players

Appendix D shows 19 companies who offer collection management software in North America. Table 2 lists 15 CHIN-certified collections management software products along with their CHIN rating. Gallery Systems, MINISIS, and Willoughby Associates each have two CHIN-certified products.

Table 2   CHIN Certified Museum Management Software

Rank	Product	Company	Rating
1	The Museum System	Gallery Systems	72.32
2	MuseumPlus	Zetcom AG	71.75
3	KE Emu	KE Software Inc.	67.60
4	ADLIB Museum	ADLIB Information Systems	65.57
5	M3	MINISIS Inc.	64.13
6	STAR/Museums	Cuadra Associates	60.94
7	MINT (MINISIS Integrator)	MINISIS Inc.	60.88
8	Vernon	Vernon Systems Ltd.	60.59
9	EmbARK	Gallery Systems	59.90
10	Multi MIMSY 2000	Willoughby Associates Ltd.	57.08
11	Re:discovery	Re:discovery Software Inc.	55.76
12	Virtual Collections	Gestion de collections informatisees	55.43
13	PastPerfect Museum Software	Pastime Software Company Inc.	52.60
14	IO	Willoughby Associates Ltd.	41.86
15	The Visual Archiver	Commonwealth Historic Resource Management Ltd.	25.93

(Canadian Heritage Information Network)

A higher rating denotes that the software satisfies a higher proportion of desired functionality. Thus, The Museum System from Gallery Systems is a superior product in the North American market whereas MuseumPlus from Zetcom is more prevalent in Europe.

2.5.4 Trends

Similar to the archives management software industry, collections management software industry is stable. As happened in the past, innovations or new software features will come up from CHIN and collections management software vendors will provide those features.

2.5.5 Analytical Insights

There are about 1100 museums and art galleries in Canada and about 1350 museums and art galleries in the USA (Virtual Library museums pages). Many of them may not have collections management software, mainly due to budget constraints. Unlike many library management software, which are tailored to some extent for, say, public libraries or schools, collections management software tends to be generic. However, to succeed in the industry, CHIN accreditation is vital. The players who do not have CHIN accreditation will need extra sales efforts and strong references.

2.6 Key Success Factors

To succeed—or even withstand competition—in these four industries, a vendor must have some capabilities and resources. Although these capabilities and their importance will vary from industry to industry, the following are crucial capabilities for a vendor of these software.

2.6.1 Product Quality

The software should meet leading industry standards and should deliver what the vendor claims it can do. In addition to an attractive and easy-to-use user interface, the software's performance at the peak load (numerous users accessing a large database) should be satisfactory. The software should also have adequate documentation for the users.

2.6.2 Service

For any commercial software, the vendor should provide good pre- and post-sales service. The vendor should assist a customer in understanding the product features through an online demo or by giving a trial version.

2.6.3 Agility

The vendor should be able to identify breakthrough technologies such as the Internet, develop a suitable product, and seek first-mover advantage. It should also be able to match the better features of competing products quickly and provide the enhancements requested by customers.

2.6.4 Resources

Although the physical resources such as computers have become cheaper and easily available, the human resources—crucial for the success in a software business—are costly and scarce. Acquiring talented developers and sales people put pressure on financial resources.

2.7 Conclusion

To conclude, looking across all industries that Eloquent competes against in the North American market, New York-based Cuadra Associates offer products in all four industries, whereas Minisis and Open Text offer products in three of the four industries. Thus, Cuadra, MINISIS, and Open Text are Eloquent's main competitors across the product spectrum. Table 3 shows the comparison of their main features. Furthermore, Eloquent competes with many niche players. Table 4 shows the niche players with whom Eloquent competes in each industry.

Table 3   Eloquent's Competitors across Product Spectrum

	Cuadra	MINISIS	Open Text
Established	1978	1976	1991
Library Software	STAR/Libraries	M2L	Livelink for Libraries
Records software	STAR/RIMS	-	Livelink Records Server
Archives Software	STAR/Archives	M2A	Livelink Collections Server
Collections Software	STAR/Museums	M3 MINT	-
DoD 5015.2 certification	No	-	Yes
CHIN Accredited	Yes	Yes	-
ASP Service	Yes	Yes	Yes
Publicly Traded	-	-	NASDAQ and Toronto SE

See Bibliography for website sources

Table 4   Eloquent's Competitors in each Industry

Library Software	Records Software	Archives Software	Collections Software
Innovative Interfaces	MDY Advanced Technologies	Records Management Software	Pastime Software Company
EOS International	Infolinx System Solutions		Re:discovery Software
Inmagic	LaserFiche		KE Software
Book Systems	Mobius Management Systems		Gestion de collections informatisées
Surpass Software	Documentum		Willoughby Associates
SIRSI Corp	OmniRim Solutions		Gallery Systems
Sagebrush	TOWER Software		Vernon Systems
	WinPat Holdings		Questor Systems

See Bibliography for website sources

Fuelled by SOX, the records management software industry will grow faster over the next 2-3 years than the other three software industries. Within the industry segment, vendors having either SOX and DoD-compliant software or integrated solutions for electronic document management and electronic records management will find it easier to penetrate the growing market. Customers from non-industry segments are not too concerned about SOX today but would prefer DoD compliant software. A vendor whose product does not comply with these standards but have reasonable pricing may be able to capture small-sized customers.

The industry structure of library management software makes for some tough competitive dynamics. On one hand, there are big players with economies of scale and large budgets. On the other hand, there are nimble and innovative niche players. Since the industry is mature and have little scope for breakthrough innovations, a big player will find it relatively easy to add new customers by leveraging its existing customer base.

The size of the archives management software industry is the smallest of all four industries with government archival institutions as primary customers. As aforementioned, the museum management software industry is mainly driven by CHIN. Therefore, vendors having CHIN-accredited products would benefit.

This external analysis of the industry structure and the dynamics of each market have served to understand potential opportunities that may exist for a firm like Eloquent. However, to

appreciate whether these are viable opportunities for Eloquent to explore, given its low risk

strategy, an internal analysis of Eloquent follows.

3 INTERNAL ANALYSIS OF ELOQUENT

After understanding the four industries Eloquent competes within, it is crucial to understand how closely its products meet the demands of these industries and what resources it can leverage. This knowledge will help in designing a suitable strategy for Eloquent in the coming chapters. Accordingly, this chapter analyses Eloquent's internal environment. It begins with the organization structure and management style. It then analyses Eloquent's revenue model and customer profile. Finally, it examines Eloquent's competences and resources.

3.1 Organization Structure and Management Style

Although Eloquent has been in the software business for the past 20 years, it resembles a start-up. It has a functional structure and its configuration is "simple" (Mintzberg 105) with no middle management. Its founder and president manages the software development, performs many day-to-day operations, and formulates strategies. In general, Eloquent's management is not very aggressive.

Eloquent's two key functions are software development and sales. Software development currently provides enhancements that are requested by customers—mainly additional features and performance improvements. It also oversees customer support by answering customers' queries and monitoring hosted applications. Most of the sales function is outsourced to four authorised consultants and agents. Two of these four consultants specialize in one application area each—one in archives management and the other in records management—and hence they sell only that product. All of these authorised consultants and agents work on a sales commission basis i.e., they are paid commission only after their sales leads are converted into customers. Furthermore,

they are not exclusive agents of Eloquent's products and, if found profitable, may sell product's of other vendors. This lack of dedicated sales force affects Eloquent adversely.

3.2 Product Features

Using the latest technologies, such as Java and XML, Eloquent developed WebLibrary in 2000, WebMuseum in 2001 and both WebRecords and WebArchives in 2002. WebLibrary and WebRecords come in modules so that a customer can select only required features. Although these products are fairly new to the market, they provide most of the features required by a typical customer and their performance is satisfactory. However, two of these four products do not comply with crucial industry standards.

Eloquent's WebLibrary doesn't support Z39.50 features. However, BookWhere Online service from WebClarity Software can be used with WebLibrary for Z39.50 features—albeit one-way. It means a library having Eloquent's WebLibrary software and BookWhere can search and retrieve the resources from any Z39.50-compliant library. However, any other Z39.50-compliant library can't search and retrieve information from the database of Eloquent's WebLibrary.

WebRecords does not have DoD 5015.2 certification and there are no immediate plans to provide SOX features within WebRecords. On the other hand, WebArchives provides both EAD and RAD standards.

Eloquent had CHIN accreditation for the DOS version of its collections management software. However, it has not opted for this accreditation for its WebMuseum even though this software provides nearly all the requisite features. Nonetheless, Eloquent is confident of getting this crucial accreditation in the next year.

3.3 Revenue Model

Eloquent earns revenue in two ways: sale of products and service and maintenance. Sale of products generates one-time revenue from each customer whereas annual service and maintenance generates recurring revenue as long as a customer renews its maintenance contract. Thus, customer loyalty around maintenance is crucial to profitability. This is especially true in weak economy where selling new licences becomes difficult.

3.3.1 Sale of Products

Like most enterprise applications, Eloquent offers its products in three different editions, which are based on number of records in the database. All of the four products need at least one licence of WebGENCAT's application server. However, a customer may have to purchase more than one licence to improve the performance of the system if it has a large number of records and many simultaneous clients. In addition, the customer needs to purchase read-write and read-only licences based on its requirements. Considering unlimited number of records, unlimited users accessing the application database, and two licences of WebGENCAT's application server, the prices of WebRecords, WebArchives, and WebMuseum fall in the range of $10,000 to $15,000. The price of WebLibrary, with all modules, is about $20,000, however, Eloquent offers a discount on WebLibrary to K-12 schools.

Since all these four software applications are already developed, the marginal cost of reproduction is zero (Shapiro 21). Thus, assuming equal sales and service efforts on each product, WebLibrary is the most profitable product even with the discounted price for K-12 schools.

3.3.2 Service and Maintenance

Eloquent's service and maintenance consists of two parts: software support and application hosting—popularly known as application service provider (ASP) service. Customers can select either one of them. Customers who opt for software support get free software upgrades

and hotline support for assisting them in the use of the software. The annual cost of this service is 15% of the software price. Unless they have opted for application hosting service, most of Eloquent's customers subscribe to software support. Thus, each sale of a new licence most likely results in recurring annual revenue from software support.

By offering an application hosting service, Eloquent aims to attract small organizations with low IT budgets as well as large organizations keen on outsourcing their non-core IT applications. Under the application hosting service, Eloquent hosts the application on its own server on behalf of its customer for an annual base fee. It further charges 30% of software price each year. For example, to host WebMuseum with an unlimited number of records, a typical customer pays about $6,500 per year. Prima facie, this annual cost of application hosting appears to be very expensive from customer's perspective. However, customer doesn't purchase the software and doesn't need annual software support. In addition, the customer saves the administration cost had it hosted the application onto its own server.

Thus, for a customer, purchasing the software and opting for software support is a cheaper option in the medium- to long-run if there is no real increase in its administration cost. For example, a law firm may find it difficult and costly to host WebLibrary in-house and may opt for an ASP service. However, if the same law firm already has other IT systems in place and competent IT staff, which can maintain WebLibrary in addition to the other IT systems, then the law firm will purchase WebLibrary and host it onto its own server. Thus, the decision to purchase or opt for an ASP service mainly depends on customers' perception of its administration cost. The decision also depends on how critical the application is for an organization. For example, a public library may not outsource its library management application but a law firm may do so.

For Eloquent, the sale of products and the service and maintenance contracts have generated nearly equal revenues for the past two years. This has resulted mainly from the increasing revenue of the application hosting service. However, for a small company with new

products, the sales revenues should be higher than the service revenues. Aggressively selling its software products to new customers, rather than promoting its hosting service, will benefit Eloquent in the long run.

3.4 Customer Profile and Product Sales

Over the last four years Eloquent has sold a total of 62 licences of its products to customers from many sectors. Of these 62 customers, 56 have opted for annual service and maintenance. Figure 2 shows the share of each product in total sales over the past 4 years and figure 3 shows sales within each sector.

Figure 2   Percentage Sale of Eloquent's Products
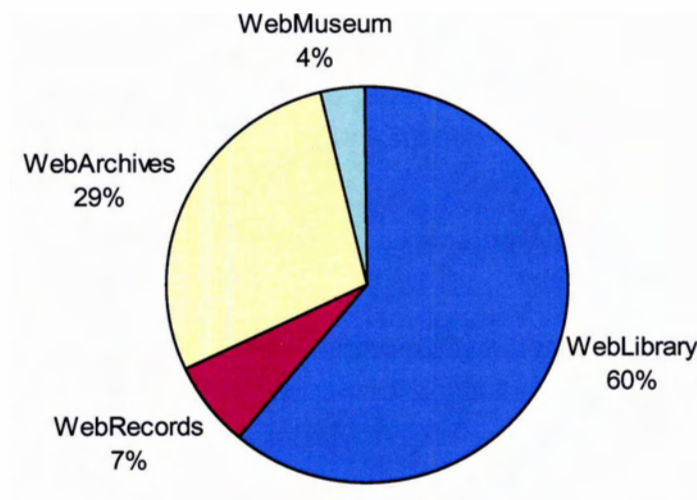
Figure 3   Eloquent's Sales within each Sector
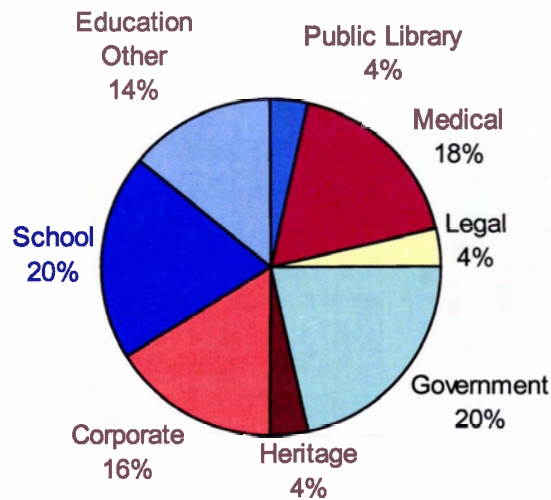
From Figure 2, it is evident that WebLibrary and WebArchives constitute about 90% of total sales while government is the largest sector (12 licences) closely followed by schools (11 licences). All of the licences sold to the school sector were WebLibrary and 50% of the licences sold to government were WebArchives. However, the market share of WebLibrary, WebRecords, WebArchives, and WebMuseum in the total North American market is less than 1 percent.

Although it appears that WebLibrary has outperformed Eloquent's other software products, its success can be mainly attributed to the fact that library management software had a large share in the DOS-based licences sold by Eloquent in the last decade, many of whom have now switched to WebLibrary. That said, for Eloquent, WebLibrary and WebArchives are better and more successful products than WebRecords and WebMuseum primarily because the former two comply with popular industry standards.

3.5   Resources and Competences

The following are Eloquent's existing resources and competences:

3.5.1   Experience and Reputation

Eloquent has been in the software business for more than two decades and has sold more than one thousand licences of its DOS-based products. Thus, many decision makers know Eloquent for its reliable and stable products. Furthermore, Eloquent has some reputable customers including the North Vancouver Museum and Archives, Public Archives of Nova Scotia, City of Toronto, International Monetary Fund (WebArchives), Alberta Human Resources and Employment (WebRecords), Art Gallery of Newfoundland and Labrador (WebMuseum), BC Ministry of the Attorney General, and the Insurance Bureau of Canada (WebLibrary). Interestingly enough, Eloquent has not marketed its product for the past 3 years; however, it can leverage these references to attract new customers.

3.5.2   Skills and Knowledge

The software business primarily runs on the knowledge and skills of employees. Eloquent's founder and president is a veteran with huge tacit knowledge of all the four industries. Its development team, although new to the organization, is able to provide the features demanded by its customers. The team also handles software support as well as application hosting.

3.5.3   Product Features

WebLibrary and WebArchives contain most of the features offered by competing products. WebMuseum also has most of the features of CHIN-accredited software products. Thus, these products are at par with, if not better than, competitive products.

Given the external analysis, the following are the resources and competences that will help Eloquent to succeed within these industries:

3.5.4 Standards

Eloquent's products must comply with major standards and have required certifications. Thus, it needs to get CHIN accreditation and DoD 5015.2 certification for WebMuseum and WebRecords respectively.

3.5.5 Agility

Although Eloquent competes in developed markets where not many innovations take place, it needs to be agile not only in matching the features of competitive products but also in offering those features with some innovative variations. Once Eloquent distinguishes its products, it can choose either a price skimming strategy or a market penetration strategy to its advantage.

3.5.6 Price and Sales Approach

Eloquent's products are not inexpensive. Potential customers, mostly governments and non-profit organizations, will obviously evaluate many products. Therefore, Eloquent must have an aggressive but patient sales force that will not only assist potential customers by way of consultations and demos but also gather valuable feedback to enhance Eloquent's products. The sales force should also leave an impression that Eloquent cares and will provide good post-sales service.

3.6 Conclusion

Over the past 2-3 years, Eloquent has made its web-enabled applications robust, however, it has exhibited limited growth. This performance was mainly due to an outsourced sales function and Eloquent's strategy of targeting existing DOS-based customers. However, it is now in a position to leverage the references built over the past three years to attract more customers.

Eloquent has been more successful with WebLibrary and WebArchives than WebRecords and WebMuseum. To some extent this is because WebLibrary and WebArchives comply with the

requisite industry standards whereas WebRecords and WebMuseum do not. Also, WebLibrary has the highest contribution margin.

To boost its revenue, Eloquent needs to penetrate the markets. However, it has hidden in its own shell for the past few years. It needs to begin by making itself more visible in the marketplace. With its low-risk strategy and some financial constraints, it cannot choose large-scale advertisement and will have to look to cheaper but effective ways to accomplish this.

This internal analysis has helped in providing the basis by which Eloquent can succeed in the market and what it needs to develop. Using the insights of this internal analysis and the external analysis discussed in the previous chapter, the next chapter builds the foundation of Eloquent's marketing strategy.

4 STRATEGIC ALTERNATIVES FOR ELOQUENT

After generating an understanding of the external and internal environment of Eloquent in the previous two chapters, this chapter generates alternatives that will help Eloquent approach new customers. The chapter first summarises the findings of a SWOT analysis. To get better results from the limited investment available due to the low risk strategy, the chapter moves on to recommend a focused marketing strategy, which considers the products Eloquent would benefit most from concentrating on and the markets it should target. The chapter finally generates alternative marketing methods.

4.1 SWOT Analysis

Based on the external and internal analysis, the following are Eloquent's strengths and weaknesses as well as its opportunities and threats.

4.1.1 Strengths

- More than two decades of experience in developing and selling software

- Products that are tightly integrated and based on proven and latest technologies

- Happy existing customers due to decent customer support

- WebLibrary and WebArchives satisfy requisite industry standards

- Reputed brand identity due to its popular GENCAT application in the last decade

- With few members and low overheads, Eloquent can change gears smoothly in the changing environment

- Limited number of good references from reputable customers which could be used to attract more customers

- Arguably, its low-risk strategy especially if high returns are not expected

4.1.2 Weaknesses

- Not active in the market over the past 3 years

- Lack of strong in-house sales force—crucial for selling to non-profit organizations

- Most enhancements are customer driven rather than internal innovations

- Highly dependent on the one-man-show of its president

- Limited financial resources restrict marketing efforts and ability to attract best talent

- WebMuseum and WebRecords lack popular industry standards

4.1.3 Opportunities

- Growing records management software industry due to SOX

- Low competition in the archives management software industry

4.1.4 Threats

- Increasing number of open source software for library management

- Matured library management software industry with many successful niche players

4.2 Product Focus

Given its limited resources, Eloquent, for the time being, should focus on only two products. To decide which two products to focus on, a weighted average method is used. Based on external and internal analysis, this method considers important criteria and the relevance of

each criterion across the industries from Eloquent's perspective. Accordingly, five key criteria, namely competition, references, contribution margin, conformity with standards, and industry growth are identified, and each criterion is assigned a weight of 0.2. Then, based on the criterion and industry, a value of 1, 2, or 3 is assigned with 1 representing least favourable, 2 moderate and 3 most favourable. A weighted average is then calculated. Table 5 shows the outcome of this method.

Table 5   Weighted Average Method with Equal Weights

		Software Industry							
Weight	Criterion	Library		Records		Archives		Collections	
0.2	Competition	0.2	1	0.2	1	0.6	3	0.4	2
0.2	References	0.6	3	0.2	1	0.4	2	0.2	1
0.2	Contribution Margin	0.6	3	0.4	2	0.2	1	0.2	1
0.2	Conformity with Standards	0.6	3	0.2	1	0.6	3	0.4	2
0.2	Industry Growth	0.2	1	0.6	3	0.4	2	0.2	1
1.0	Weighted Average	2.2		1.6		2.2		1.4	

The value of 1, 2, or 3 in the small squares of each cell denotes whether that criterion is most or least favourable to Eloquent for that industry. Thus, the first row of competition denotes that from Eloquent's perspective, competition is least favourable in the library and records management software market, most favourable in the archives management software market, and moderate in the collections management software market. Similarly, the last row of industry growth denotes that from Eloquent's perspective, industry growth is least favourable in the library and collections management software market, most favourable in the records management software market, and moderate in the archives management software market. Thus, given the insights of external and internal analysis, the weighted average of 2.2 denotes that the library and archives management software industries are the best bet for Eloquent.

The above method assumes that each criterion has equal importance. However, it can be argued that the industry growth and competition are more significant than the contribution margin and references in the present competitive industries. Hence, a sensitivity analysis is carried out by

increasing the weights of competition and industry growth by 0.05 and by reducing the weights of

contribution margin and references by 0.05. Table 6 shows the results of this sensitivity analysis.

Table 6   Weighted Average Method with Unequal Weights

| Weight | Criterion | Software Industry | | | | | | | |
		Library		Records		Archives		Collections	
0.25	Competition	0.25	1	0.25	1	0.75	3	0.50	2
0.15	References	0.45	3	0.15	1	0.30	2	0.15	1
0.15	Contribution Margin	0.45	3	0.30	2	0.15	1	0.15	1
0.20	Conformity with Standards	0.60	3	0.20	1	0.60	3	0.40	2
0.25	Industry Growth	0.25	1	0.75	3	0.50	2	0.25	1
1.0	**Weighted Average**	**2.00**		**1.65**		**2.30**		**1.45**	

Again, the library and archives management software industry stand out from Eloquent's

perspective, with weighted averages of 2 and 2.3 respectively. This shows that library and

archives management software industries are better industries for Eloquent and therefore

Eloquent should focus on WebLibrary and WebArchives.

However, this product focus has its two limitations. First, ideally, Eloquent should focus

on WebRecords, as the records management software industry is currently "hot," especially in the

United States. Its fast-growing size will attract new players. Since Eloquent has already

developed WebRecords, it will have an edge over these new players. If it can provide SOX

features and get DOD 5015.2 certification, it will find selling new licenses of WebRecords easier

than selling WebLibrary. However, Eloquent does not have any immediate plans to provide these

features in WebRecords since it will require additional capital investment. Hence, for the time

being, Eloquent should stay away from the records management software market.

Second, although WebLibrary meets requisite standards, the library management

software market is mature and saturated with numerous small- to large-sized vendors. No doubt

that Eloquent will have to compete intensely with them. However, since WebLibrary is the most

profitable product of Eloquent, extra marketing efforts are likely to be worthwhile.

4.3 Target Market

Now that the product focus has been decided upon, Eloquent should target niche markets to reap maximum benefits from its limited marketing budget. Eloquent's market can be segmented on the basis of end-user applications or geographies. Based on end-user applications, markets can be segmented in the following manner: governments, academic institutions, public libraries, private and public companies, and art galleries and museums. Using geographic location, the markets can be segmented into the United States and Canada. It is better to segment Eloquent's market based on end user applications. Table 7 shows a rough estimate of the use of software by each segment.

Table 7   Use of Software by each Segment

Segments	Library Management	Records Management	Archives Management	Collections Management
Governments	10%	20%	70%	–
Academic Institutions	50%	20%	20%	5%
Public Libraries	25%	–	–	–
Private / Public Cos.	15%	60%	10%	5%
Art Galleries / Museums	–	–	–	90%

Thus, academic institutions, such as schools, universities, and research institutions, are the major users of library management software. Eloquent should target this segment. However, WebLibrary along with BookWhere Online can support Z39.50 features only one-way. Hence libraries of universities and research institutions, which want to extend searching of their database to other libraries, will not choose WebLibrary. However, school libraries are not research-oriented and hence Eloquent should target school libraries.

Archival management software is primarily used by government archival institutions at the city-, state-, and national-level. With fewer players in archive software industry, Eloquent should find it easier to target this segment for WebArchives than school libraries for WebLibrary.

4.4 Advertisement

Now that the product focus and the market segments have been decided upon, Eloquent should decide a suitable advertising strategy. Within an advertisement campaign, Eloquent should consider using two separate images, each targeted at school libraries and archival institutions. The image shown in figure 1 is reasonable for advertising in trade shows or on the home page of Eloquent's website, as it portrays Eloquent as a vendor of four web-based, tightly integrated products. However, this image may be inappropriate for marketing WebLibrary and WebArchives in niche market. Although, school and government institutions may need more than one product, rarely will they find that two or more products closely meet their requirements, and, given the prices of these products, no customer would buy more than one product at a time. Therefore, Eloquent should use two separate images in its advertisements with each targeting school libraries and archival institutions. Furthermore, Eloquent should provide testimonials from another school and archival institution. It should also highlight that it offers a special discount to K-12 school libraries.

4.5 Marketing Strategy for Eloquent

At present, Eloquent does not have a specific marketing strategy for new customers. Its current marketing strategy was to move its DOS-based customers to web-enabled products. The rationale behind this was to keep its existing customer base and create references for web-enabled products before approaching new customers. Over the past two years, Eloquent has added many features to its products based on customer feedback. To a great extent, this market orientation approach—understanding what customers want and providing these features—was better than pushing partially developed products into the market with a strong sales force. However, to grow further Eloquent now needs to sell its products to new customers. As most customers opt for the annual service, higher product sales will result in higher service revenues too. The first step in

this direction would be to make Eloquent visible in the marketplace using one or more of the following communication methods.

4.5.1 Direct Mail

Eloquent can send direct mail that includes brochures and personalised messages to school libraries and archival institutions. Although direct mailing is an effective one-to-one communication strategy for some businesses, it can be costly in addition to time consuming.

4.5.2 Direct Email

Using direct email for one-to-one communication will be cheaper than direct mail. In addition, direct email has a better initial response rate and higher conversion to leads. (Anderson). Furthermore, email lists can be used for automated communication.

The main issue with both direct mail and direct email is getting the addresses of recipients. One can visit the websites of schools and archival institutions and create a database of addresses. Another way is to purchase it from third parties such as the American School Directory, which sells information on schools. However, sending communications—especially emails—without the consent of recipients may be treated as unsolicited / spam messages. Since Eloquent deals with other organizations—and not individual consumers—unsolicited emails will adversely affect Eloquent's brand image.

4.5.3 Personal Sales Force

Eloquent could recruit some sales people to call and follow-up with prospects. Although this will result in interactive and most effective one-to-one communication, it would be the costliest alternative. That said, personal sales efforts will have to be an integral part of the sales cycle of WebLibrary and WebArchives; without them Eloquent will fail to convert leads into sales.

4.6 Conclusion

Based on the internal and external analysis, Eloquent needs to focus on WebLibrary and WebArchives, as these two products have the required industry standards and the good references needed to succeed in the market. Furthermore, Eloquent should target school libraries and government archival institutions to make the best use of its limited budget given that these segments offer better chances for success. Sending direct emails without the "opt-in" of recipient would affect Eloquent's reputation and do Eloquent more harm than good. Eloquent will have to develop a good sales force to sell its commercial software products to non-profit institutions.

This chapter puts forward decisions on product focus and target market for Eloquent. It also generates three communication alternatives. The last chapter now makes the final recommendations on Eloquent's communication strategy.

5 RECOMMENDATIONS

This chapter concludes this project with final recommendations for Eloquent. It begins with an evaluation of the alternatives mentioned in the previous chapter and then recommends an integrated communication strategy. Finally it details the risks and managerial challenges within this strategy.

5.1 Evaluation of Alternatives

Eloquent needs an inexpensive, low-risk strategy. Of the three alternatives mentioned in the previous chapter, direct email is the least expensive alternative. Direct email, while not as effective as personal sales, will have a better cost-effective trade-off. Therefore, Eloquent should select direct email for communication with its potential customers. However, Eloquent currently does not have a database of potential customers for sending marketing communication.

Eloquent can overcome this obstacle in two ways. First, it can purchase a database of people who have opted to receive the information on library and archives software, and then start sending communication to them. However, it is likely that the database may not be updated and many email addresses are invalid. Furthermore, fewer business users—especially from schools and government institutions—will seek information by opting in to such lists. Thus, purchasing a database, though inexpensive, will be far less effective. Eloquent will also risk its brand image by believing the supplier's "claim" that its database consists of opt-in email addresses.

Second, over a period of 1-2 years, Eloquent can create its own database. This may prove to be more effective in the medium term as it will have a high probability of converting a lead into sales. This is a far safer method that purchasing a database, and hence Eloquent should create

its own database of potential customers. However, this will necessitate an integrated

communication strategy, which is discussed in the next section.

5.2 Integrated Communication Strategy

The aim of this strategy is to make Eloquent more visible and build its database of

potential clients. The main elements of this strategy are advertisement, website, newsgroups and

email lists.

5.2.1 Advertisement

Eloquent should advertise WebArchives in American Archivist and Archival Outlook;

both these publications are targeted at archives professionals. Eloquent should advertise

WebLibrary in Knowledge Quest, which is widely read by school libraries media specialists.

Each advertisement should aim to drive the potential customers to its website as well as promote

the sale of product, though Eloquent can indicate its application hosting service to attract low-

budget customers.

Eloquent needs to advertise at least for one year. Table 8 shows the details of this

advertisement campaign. Thus, the total advertising cost for one year would be about $4,500 for

half-page advertisements and about $6,500 for full-page advertisements.

Table 8   Details of Advertising Campaign for WebLibrary and WebArchives

Publication	Annual Publishing Frequency	Circulation	Advertisement Cost Half / Full Page
American Archivist	2 times	4,300	$256 / $360
Archival Outlook	6 times	3,400	$228 / $382
Knowledge Quest	5 times	10,000	$510 / $675

(The Society of American Archivist) (American Library Association)

5.2.2 Website

Eloquent has recently redesigned its website to make it easier for existing and potential

customers to navigate. Currently, Eloquent's website has good information about its products, but

it can be improved from a marketing perspective by using web forms, adding educational resources, and improving the ability to find its web pages by a search engine. Each of these is detailed below.

5.2.2.1 Web Form

Eloquent needs to provide a web form that enables visitors to submit their questions and feedback and that captures visitors' information, including email addresses. This web form should indicate that Eloquent respects the privacy and does not sell customers' information to others. Eloquent should also make sure that it responds to customers' questions in a reasonable time, say, one business day.

5.2.2.2 Educational Resources

Eloquent should provide informative content on its website so that visitors not only spend more time browsing it but also come back. This can be accomplished by creating a separate section on educational resources relating to industry specific information. This may contain articles and white papers, frequently asked questions, glossary of terms, and list of other online resources. They should address industry basics, existing standards, etc. Initially visitors should be allowed to download articles directly. But as Eloquent's website gains popularity, Eloquent should ask for the visitor's email address and then email the requested article. To make this effective, Eloquent needs to keep on adding new resources to its website on a regular basis.

5.2.2.3 Search Engine

Eloquent should improve its visibility through search engines. Given the popularity of Google, Eloquent should improve its probability of coming up in within the first 2-3 pages of the search results of Google. For this it should make the best use of META tags within its web pages. It should also consider Google AdWords for advertising WebLibrary and WebArchives.

5.2.3 Newsgroups and E-mail lists

Eloquent should subscribe to and follow the discussions within popular newsgroups and email lists. This will help Eloquent understand the developments within the industry and what customers require. Occasionally, while responding to some messages, it can market its products indirectly and direct the subscriber to Eloquent's website for additional information.

5.3 Risk and Managerial Challenges

The aforementioned integrated communication strategy, though inexpensive, comes with a few risks and managerial challenges. First, many large competitors, especially in the library management software market, will have considerable marketing budgets. They will advertise in many publications, including those in which Eloquent will advertise. Thus, to attract potential customers, Eloquent's advertisements must be distinguishable. Given the limited resources, Eloquent may find it difficult to come up with appealing advertisements.

Second, the strategy assumes that library and archives professionals make—or at least are involved in—the purchasing decisions of the library and archives management software. This strategy will not work if the customers' purchasing pattern is not known or is vastly different. For example, a school district may have a committee that makes major capital expenditure decisions for all the schools in that district. This committee may not have a librarian to whom a mail could be directed (Ibbott).

Third, a website is a crucial component of the integrated communication strategy. Eloquent will have to provide really informative articles and white papers on its website. Writing them demands significant effort from its founder and president. In addition, Eloquent will have to continuously monitor the performance of its website.

The challenges associated with these risks are more than surmountable given that they are known and can be managed by Eloquent.

APPENDICES

Appendix A: Library Management Software Vendors

Vendor	Product	Location
Auto-Graphics	Agent Library Automation / Cataloguing	ON, Canada
Book-systems	Concourse	AL, USA
CASPR Library Systems	LibraryWorld	CA, USA
Companion Corporation	Alexandria	UT, USA
Cuadra Associates, Inc.	STAR/Libraries	NY, USA
CyberTools for Libraries	CyberTools for Libraries	MA, USA
Eloquent Systems Inc.	WebLibrary	BC, Canada
Endeavor Information Systems	Voyager	IL, USA
Enterprise Tracking Systems Corp	Library Tracker	UT, USA
EOS International	EOS.Web	CA, USA
Epixtech / Dynix Canada	Horizon	ON, Canada
Follett Software company	Destiny Library Manager	IL, USA
Fretwell-Downing Inc.	OLIB7	KS, USA
Gateway Software	Library Management System	MT, USA
Geac Library Solutions	Vubis Smart	MA, USA
Hunter Systems	Librarian's Edge	AL, USA
Information transform Inc	MarcMagician / AccessMarc	WI, USA
Inmagic Inc	DB/Text for Libraries Inmagic Genie	MA, USA
Innovative Interfaces Inc	Millennium	CA, USA
Jaywil Software Development Inc	ResourceMate	ON, Canada
Kelowna Software	Library 4 Universal (L4U)	BC, Canada
Keystone systems	Keystone Library Automation System	NC, USA
Library Concepts (Diakon Systems)	PC Card Catalog	TX, USA
Mandarin Library Automation	Mandarin M3	FL, USA
MINISIS Inc.	MINISIS Management for Libraries (M2L)	BC, Canada
Neuton Data Systems	PAL Library Automation System	CA, USA
New Generation Technologies. Inc	LiBRARYSOFT	WA, USA & BC, Canada
On Point, Inc.	TOTAL LIBRARY COMPUTERIZATION	DC, USA
Open Text Corp.	Livelink for Libraries	ON, Canada
Sagebrush Corp.	Spectrum	MN, USA
SIRSI Corporation	Integrated Library Management System	AL, USA
Surpass software	Centriva	GA, USA
SydneyPLUS International Library Systems Corp.	SydneyPLUS	BC, Canada
The Library Corporation	Library.Solution / CARL.Solution	WV, USA
VTLS Inc	Virtua / Vectors	VA, USA

Appendix B: Records Management Software Vendors

Vendor	Product	Location
Accutrac Software, Inc.	Accutrac	NY, USA
Business Automation Services	Records Management System	NY, USA
Colorflex	ColorTrax I.T.	CO, USA
Cuadra Associates, Inc.	STAR/RIMS, STAR/RIMS-E	NY, USA
DHS Worldwide	Total Recall	FL, USA
Documentum, Inc.	Records Manager	CA, USA
Eloquent Systems Inc.	WebRecords	BC, Canada
Infolinx System Solutions	Infolinx Web	MD, USA
Information Network International	InSight	TX, USA
Information Technology Group	ADVANTAGE records management system	CA, USA
Intersect Systems, Inc	Records Control and Management System Plus; Retention Schedule Manager Plus	TX, USA
Interwoven, Inc.	RecordsManager	CA, USA
LaserFiche	Laserfiche Records Management Edition	CA, USA
MDY Advanced Technologies, Inc.	FileSurf	NY, USA
Mobius Management Systems, Inc.	ViewDirect Records Management	NY, USA
MuniMetriX Systems Corp	Clerks Index and ImageFlow	NV, USA
OmniRim Solutions, Inc	OmniRim	BC, Canada
Open Text Corporation	Livelink Records Server	ON, Canada
Records Management Software, Inc.	SIMPLE Records Manager	NY, USA
Stellent, Inc.	Stellent Records Management	MN, USA
Thomson Elite	Records Manager	CA, USA
TOWER Software	TRIM Context	VA, USA
Triadd Software Corporation	Gain 2000	WA, USA
WinPat Holdings Ltd.	QRMS Records Management Software	BC, Canada
Zasio Enterprises, Inc.	Versatile	NC, USA

Appendix C: Archives Management Software Vendors

Vendor	Product	Location
Cuadra Associates, Inc.	STAR/Archives, STAR/Archives MARC	NY, USA
Eloquent Systems Inc.	WebArchives	BC, Canada
MINISIS Inc	MINISIS Management for Archives (M2A)	BC, Canada
Open Text Corp.	Livelink Collections Server	ON, Canada
Records Management Software, Inc.	Archive Manager	NY, USA

Appendix D: Collections Management Software Vendors

Vendor	Product	Location
ArtManager Online Services	ArtManager Online Curator / Express	NY, USA
Artsystems, Ltd.	Collections	NY, USA
Commonwealth Historic Resource Management Ltd.	The Visual Archiver	ON, Canada
Cuadra Associates, Inc.	STAR/Museums	CA, USA
DevWave Software, Inc.	Gallery Express	BC, Canada
Eloquent Systems Inc.	WebMuseum	BC, Canada
Gallery Systems	EmbARK The Museum System	NY, USA
Gestion de collections informatisées	Virtual Collections	QC, Canada
Inmagic, Inc.	INMAGIC Plus	MA, USA
KE Software Inc.	KE Emu	BC, Canada
Minaret Corp.	MINARET	NY, USA
MINISIS, Inc.	M3 – MINISIS Management for Museums MINT (MINISIS Integrator)	BC, Canada
Noratek Solutions	C-A-T-S (Collection Archive Tracking System)	BC, Canada
Pastime Software Company, Inc.	PastPerfect Museum Software	PA, USA
Questor Systems, Inc	ARGUS	CA, USA
Re:discovery Software, Inc.	Re:discovery	VA, USA
Vernon Systems Ltd.	Vernon	New Zealand
Westar Systems	MCMS (Museum Collection Management System)	CO, USA
Willoughby Associates, Limited	IO Multi MIMSY 2000	IL, USA

BIBLIOGRAPHY

Works Cited

A distributed directory of online museums. 6 Nov. 2004. Virtual Library museums pages. 22 Sep. 2004. <http://vlmp.museophile.com>

Advertising & Sponsorship Opportunities. The Society of American Archivists. 16 Nov. 2004 < http://www.archivists.org/advertising/index.asp >

Anderson, Heidi. "Email Versus Direct Mail: A Head-to-Head Test." 19 Sep. 2002. ClickZ Network. 5 Nov. 2004. <http://www.clickz.com/experts/em_mkt/case_studies/article.php/1465331>

Cibbarelli, Pamela. "July/August: ILS Software Update." Computers in Libraries, July/August 2004, Vol 24 Issue 7, 6-12

Collections Management Software Review: Comparative Analysis. 19 Apr. 2004. Canadian Heritage Information Network. 11 Sep. 2004. <http://www.chin.gc.ca/English/Collections_Management/Software_Review/compare.html>

Design Criteria Standard for Electronic Records Management Software Applications. 19 Jun. 2002. Defense Technical Information Center. 20 Sep. 2004. <http://www.dtic.mil/whs/directives/corres/pdf/50152std_061902/p50152s.pdf>

Electronic Records Management Systems. Tessella. 15 Sep. 2004 <http://www.tessella.com/Literature/Articles/OtherArticles/erms.htm>

Glossary of Archives, Records Management, Freedom of Information and Protection of Privacy Terms. Simon Fraser University. 17 Sep. 2004 <http://www.sfu.ca/archives/glossary.html>

Glossary of Terms. Sirsi Corporation. 15 September 2004 <http://www.sirsi.com/glossary.html>

Hebbard, Paul. Personal interview. 1 Oct. 2004.

Ibbott, Douglas. Telephone interview. 16 Nov. 2004.

International Efforts Toward Descriptive Standards. The Society of American Archivists. 10 Oct. 2004. <http://www.archivists.org/catalog/stds99/chapter13.html>

Issues in the Use of Encoded Archival Description. 7 Dec. 2001. University of British Columbia. 10 Oct. 2004. <http://www.slais.ubc.ca/courses/libr500/01-02-wt1/www/S_Walz/index.htm>

Knowledge Quest Advertising Rate Card. American Library Association. 16 Nov. 2004
<http://www.ala.org/ala/aasl/aaslpubsandjournals/kqweb/aboutkq/knowledgeques
tadvertising.htm>

Mintzberg, Henry. "Organization design: fashion or fit?" Harvard Business Review.
Jan/Feb 81. Vol 59 Issue 1: 103-16.

Open source systems for libraries. The oss4lib Community. 18 Sep. 2004
<http://www.oss4lib.org/projects>

Shapiro, Carl and Varian Hal R. Information Rules: A Strategic Guide to the Network
Economy. Boston: Harvard Business School Press, 1999.

Summary of Sarbanes-Oxley Act of 2002. The American Institute of Certified Public
Accountants. 20 Sep. 2004
<http://www.aicpa.org/info/sarbanes_oxley_summary.htm>

Understanding Digital Records Management. Laserfiche. 15 Sep. 2004.
<http://www.laserfiche.com/resources/recordsmanagerguide/index.html>

What Is a MARC Record, and Why Is It Important? The Library of Congress. 15 Sep.
2004 <http://www.loc.gov/marc/umb/um01to06.html>

Websites Consulted

Abden House, www.nms.ac.uk

Accutrac Software, Inc., www.accutrac.com

ADLIB Information Systems, www.adlibsoft.com

Admit Computer Services, www.admitcomputer.com

AIIM Council, www.aiim.org/fbi

AlphaCorp, www.siresolutions.com

Andrews Software, www.andrewssoftware.com

ARMA International, www.arma.org

Artfact, Inc., www.artfact.com

ArtManager Online Services, www.artmanageronline.com

Artsystems Ltd., www.artsystems.com

Auto-Graphics, www4.ag-canada.com

Book-systems, www.booksys.com

Business Automation Services, www.basny.com

Cadomel, www.cadomel.com

Canadian Heritage Information Network, www.chin.gc.ca

CASPR Library Systems, www.caspr.com

Colorflex, www.colorflex.com

Commonwealth Historic Resource Management Ltd., www.chrml.com

Companion Corporation, www.companioncorp.com

Cuadra Associates, Inc., www.cuadra.com

CVISION Technologies, LLC, www.cvisiontech.com

CyberTools for Libraries, www.cybertoolsforlibraries.com

DevWave Software, Inc., www.devwave.com

DHS Worldwide, www.dhsassociates.com

Diversified Information Technologies, Inc., www.divintech.com

Docu-Depot, www.docudepot.com

Documentum, Inc., www.documentum.com

Dupont Systems, www.dupontsystems.com

E-BizDocs, Inc., www.e-bizdocs.com

Endeavor Information Systems, www.endinfosys.com

Enterprise Tracking Systems Corporation, www.librarysoftware.com

EOS International, www.eosintl.com

Epixtech / Dynix Canada, www.epixtech.com

Eurotec Consultants Ltd., www.eurotec.co.uk

Focused Technologies, www.focused-tech.com

Follett Software Company, www.fsc.follett.ca

Fraser-Fort George Regional Museum, www.theexplorationplace.com

Fretwell-Downing, Inc., www.fdusa.com

Gallery Systems, www.gallerysystems.com

Gateway Software Corporation, www.gscweb.com

Geac Library Solutions, www.library.geac.com

General Code Publishers, www.generalcode.com

Genesis Systems, Inc., www.genesisinfo.com

Gestion de collections informatisées, www.gci.ca

Google, www.google.ca

Hunter Systems, www.huntersystems.com

Hunterian Museum, www.hunterian.gla.ac.uk

Ibase Headquarters, www.ibase.com

IKON Office Solutions, www.ikon.com

ImageWork Technologies, www.imagewk.com

Infolinx System Solutions, www.infolinx2000.com

Information Network International, www.iniinc.com

Information Technology Group, www.technologygroup.net

Information Transform Inc., www.mitinet.com

Inmagic, Inc., www.inmagic.com

Innovative Interfaces, Inc., www.iii.com

Internet Library for Librarians, www.itcompany.com/inforetriever

Intersect Systems, Inc., www.intersectsystems.com

Interwoven, Inc., www.interwoven.com

Jaywil Software Development Inc., www.jaywil.com

KE Software Inc., www.kesoftware.com

Kelowna Software, www.l4u.com

Keystone Systems, www.klas.com/index.html

Koha, www.koha.org

LaserFiche, www.laserfiche.com

LIB-IT Gmbh, www.libero.de

Library Concepts, www.libraryconcepts.com

Logistic Systems, Inc., www.logistic-systems.com

Maden Technologies, www.madentech.com

Mandarin Library Automation, Inc., www.mlasolutions.com

Maxus Australia Pty Ltd., www.maxus.net.au

MCS Spectrum, www.harriscomputer.com/spectrum

MDY Advanced Technologies, Inc., www.mdy.com

Minaret Corp., www.minaretsoftware.com

MINISIS, Inc., www.minisisinc.com

Mobius Management Systems, Inc., www.mobius.com

MuniMetriX Systems Corp., www.munimetrix.com

Museum Research Associates, www.curatorsoncall.com

Neuton Data Systems, www.neuton.net

New Generation Technologies, www.librarysoft.com

New York State Archives, www.archives.nysed.gov

Noratek Solutions, www.noratek.com

OmniRim Solutions, Inc., www.omnirim.com

On Point, Inc., www.onpointinc.com

Open Text Corporation, www.opentext.com

Pastime Software Company, Inc., www.museumsoftware.com

Questor Systems, Inc., www.questorsys.com

Re:discovery Software, Inc., www.rediscov.com

Records Management Software, Inc., www.recordsmanager.com

Sagebrush Corp., www.sagebrushcorp.com

SIRSI Corporation, www.sirsi.com

Smead Software Solutions, www.smeadsoftware.com

Software Corporation International, www.sci-solutions.com

Stellent, Inc., www.stellent.com

Surpass Software, www.surpasssoftware.co.uk

SydneyPLUS International Library Systems Corp., www.ils.ca

Systems Simulation Ltd., www.ssl.co.uk

TAB, www.tab.com

Technology Solutions, www.techsolutionswny.com

The Brechin Group, Inc., www.brechingroup.com

The Information Group and Records Solutions, www.tigrs.com

The Library Corporation, www.tlcdelivers.com

Thomson Elite, www.elite.com

TOWER Software, www.towersoft.com

Triadd Software Corporation, www.triaddsoftware.com

Ucora Corporation, www.ucora.com

Uniscribe Professional Services, www.uniscribe.com

Vernon Systems Ltd., www.vernonsystems.com

Visionary Systems Ltd., www.visionary.com

VTLS Inc., www.vtls.com

Westar Systems, www.westar-systems.com

Willoughby Associates, www.willo.com

WinPat Holdings Ltd., www.qrms.com

xwave Solutions, www.xwavesolutions.com

Zasio Enterprises, Inc., www.zasio.com

zetcom AG, www.zetcom.com