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This study examines on-line job advertisements to locate the skills, experience, qualifications and educational requirements needed to perform two specific job functions within a knowledge-based organization. The two positions examined are those of the special librarian and the chief information officer. The purpose of this study is to discover what similar qualifications are required for each position, and then to locate any gaps in the skills, education and experience needed to successfully perform the job.

Advancements in information technology make it essential for all information professionals to adapt to change and to challenge themselves by becoming more efficient in their jobs and subsequently, more important to the organization. Special librarians can strive to reach the position of chief information officer in an information organization by knowing what skills and qualifications are needed to perform such a job.

#### Headings:

Special librarian

Special librarian-aims and objectives

CIO

Job analysis

Content analysis

THE SPECIAL LIBRARIAN AND THE CHIEF INFORMATION OFFICER:  
A COMPARISON OF SKILLS AND QUALIFICATIONS

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## INTRODUCTION

As we move toward the millenium, rapid changes in information technology will have an impact on the way that information is acquired, indexed and disseminated. As the technology visions of tomorrow become the reality of today, there will be a greater need for the management of information systems, increasing the demand for skilled professionals who are trained to work with information. Library and information professionals have historically been trained to work with and organize many types of data, but in today's world of rapid change, it appears that new skills are needed to be successful in the management and dissemination of information. Along with changes in technology come changes in the way in which information is viewed, shared and turned into knowledge. In corporate organizations around the world it has become clear that information, and the knowledge it may become, are extremely important assets; currently great strides are being taken to capture and exploit this type of wealth.

Within the corporate world there are two positions that are well suited to take on the challenge of managing and organizing information, as well as finding the most efficient ways to share the knowledge that is so critical to the success of the organization. These two professional positions both share common elements that will make them successful in managing information in a knowledge organization, yet there are also some differences in the skills, qualifications, educational requirements and experience that are required to perform these jobs with the greatest impact. The two positions are those of the chief information officer and the special librarian. The position of the chief

information officer is generally found at a higher level within the corporate structure than that of the special librarian, therefore it seems logical to discover what further skills are needed for the special librarian to achieve this position. The purpose of this study is to examine job advertisements for the two positions and discover what similar qualifications are demanded for each position, and then to locate any gaps in the skills, education and experience. Advancements in information technology make it essential for all information professionals to adapt to change and to challenge themselves by becoming more efficient in their jobs, and subsequently, more important to the organization. Special librarians can strive to reach the top position in an information organization by being aware of the skills and qualifications needed to perform such a job.

## LITERATURE REVIEW

Information is data organized into meaningful patterns. According to Glasser (1998) “information is when one or more facts are put together, and from that a new fact is created, and thus new information” (p. 114). Marshall (1997) writes, “information is transformed into knowledge when a person reads, understands, interprets and applies the information. Knowledge becomes *visible* when experienced persons put into practice lessons learned over time” (p. 94). In the knowledge-based organization, there is high importance on receiving only the most valuable information and having the less useful information filtered out, a job that is generally undertaken by a special librarian (“Competencies for the Special Librarian of the 21<sup>st</sup> Century”, 1996). In today’s world of rapid change in information technology, highly adaptive organizations are looking at information and knowledge, and the way they are managed, in a different light. They realize that new technology platforms can facilitate the ways in which information may be shared and transferred amongst employees, however, with this change comes the need for new skills and competencies in the professionals who are charged with managing the flow of information (Marshall, 1997).

Experienced information professionals in a knowledge-based organization have different functions, but the end goal remains the same: to capitalize on the information that is available to the organization and manage it as an asset (Glasser, 1998). Employers look to fill two different positions, on different levels, to ensure that the management of

this asset is done in the most efficient manner possible. These two positions are that of the special librarian and the chief information officer, two positions that share similar qualifications and skills, but exist on different levels within the knowledge-based organization.

According to Samitt (1999), the corporate environment has changed from being an industrial-based environment to a knowledge-based one as an outcome of advanced technologies and globalization. The term “knowledge management” is a relatively new one that has many different definitions and meanings to different organizations. DiMattia and Oder (1997), note that “definitions of knowledge management are legion. The basic elements include accessing, evaluating, managing, organizing, filtering, and distributing information in a manner that is useful to the end users — professional judgment-based activities perfected by librarians” (p. 33). Marshall (1997) also wonders if there is a distinction between knowledge management and the area with which most information professionals are already familiar, that of information management. Knowledge management involves blending a company’s internal and external information and turning it into actionable knowledge, generally via a technology platform. Knowledge has become intellectual capital. It resides in employees whose experience, insights, skills and competencies are the organization’s most valuable resource (Duffy, 1998). Like information, knowledge is intangible, dynamic and difficult to measure, but without it, and without the proper management, no organization could survive (Glasser, 1998).

Information and knowledge management has arisen out of a fundamental shift in the way organizations are doing business. After years of downsizing, organizations have come to realize that they had lost years of valuable information and expertise, and many

are determined to protect themselves against a reoccurrence. Business literature suggests that knowledge management provides special librarians with a vital role (Glasser, 1998). What is needed is someone who combines the skills of a webmaster, technical communicator, librarian, and business analyst. DiMattia and Oder (1997), “consider librarians a central part of the process: they know more about gathering, categorizing, and distributing knowledge than just about anyone, and they are usually good at eliciting the knowledge requirements of their customers” (p. 33).

With the technological changes and advancements that are occurring in the area of information access, management and delivery, the role of the special librarian in a knowledge-based organization is changing. Not only are special librarians increasingly taking responsibility for knowledge management projects, they are also expected to have a high level of technical skills (Marshall, 1997). Koenig (1993) notes that educational requirements for a library-oriented career in information management have changed dramatically in the last decade, and one of the major reasons for this is the fact that there has been an increase in the number of librarians taking jobs in the corporate setting. He writes that, “the consequence...is that special or corporate librarians must frequently create information systems to handle the internal data or to enrich or expand access to external data. Precisely because it is internal data which is often unique to the organization, there is no ready made information service that can be purchased; an information system must be created. This, of course, requires people who can create information systems” (p. 277). Along with the task of managing and creating information systems, there are also decisions to be made about vendors, data conversion,

search engines, and display formats. These areas of decision are generally made easier with the knowledge of information technology and data design.

In May 1996 the Special Libraries Association issued a report on “Competencies for Special Librarians of the 21<sup>st</sup> Century”. This report was prepared for library science educators, prospective students of library science, currently practicing special librarians, and for managers who are responsible for hiring library and information science professionals. The intention of the document is to examine the competencies that are needed by special librarians to most effectively perform their jobs. In this document, competencies are defined as, “the interplay of knowledge, understanding, skills and attitudes required to do a job effectively from the point of view of both the performer and the observer”. The Special Libraries Association report also points out three paradigm shifts that library and information science professionals are facing as we move toward the millennium:

The first shift is the transition from paper to electronic media as the dominant form of information storage and retrieval. Linked to this transition is the convergence of previously separate media, such as text, graphics, and sound into multimedia resources.

The second shift relates to the increasing demand for accountability, including a focus on customers, performance measurement, benchmarking and continuous improvement. All of this is taking place in an era when the financial resources available for providing library and information services are shrinking.

The third shift comes from new forms of work organization such as end-user computing, work teams, management delayering, job sharing, telework, outsourcing, downsizing and re-engineering (1996).

The document goes on to say that “in the information age, special librarians are essential - by responding with a sense of urgency to critical information needs they provide the information edge for the knowledge-based organization. In order to fulfill this key information role, special librarians require two main types of competencies: professional and personal”. The professional competencies cover such areas as information access and technology skills along with management and research skills. The personal competencies focus on good communication skills, high values, and the motivation to participate in continuing education.

With so many new skills being required of the special librarian to successfully perform their role in a knowledge-based organization, what additional skills and qualifications are needed to reach the executive level of chief information officer? According to Earl (1996) the chief information officer has organization-wide responsibility for the use and management of information, technology, and administrative services. The position came about in the early 1980's as new information technologies arrived and began to converge with computing. It became apparent that there was a need for someone to oversee the formation and execution of technical policies and standards required for building the information technology architecture. This explosion of information processing created an activity in need of leadership and a production function in need of management which required more than the skills of a technical specialist (Earl,

1996). Similar to the competencies needed for the special librarian to adequately perform within a knowledge-organization, the skills needed to be a successful chief information officer include technical, managerial and interpersonal skills. Smith (1996) writes that the ideal chief information officer candidate has the following: grasp of technical infrastructure, the ability to determine what information is critical, has the respect of the chief executive officer, can work independently and has a background in consulting, academia or technology.

Earl (1996) notes that business and industry knowledge are required, along with several years of general management experience. He further writes that social skills are important to those who have succeeded as the chief information officer, especially those of leadership, teamwork, communication, and motivation. Other factors mentioned were the ability to give presentations to large groups of people, as well as the ability to talk with subordinates and peers on a one-to-one basis.

As chief information officer positions are being created in knowledge-based organizations, special librarians wonder if they are prepared to fill such positions (Corcoran and Jones, 1997). In a study done for the Special Libraries Association, Corcoran and Jones interviewed 23 individuals within 11 organizations to discover what competencies are expected of information executives in general, and knowledge executives in particular. Comparatively, they also interviewed special librarians and highlighted the competencies many felt they lacked when compared with the competencies for the position of chief information officer. Corcoran and Jones point out that it is important for the special librarian who is interested in obtaining an executive position to recognize these gaps so that they can begin to develop the skills needed for

their careers to progress. Based on their research, they note the following specific skills which executives are expected to demonstrate:

<b>Communication</b>	<p><i>Presentation skills:</i> present information and concepts concisely, articulately, coherently, and within the audience’s context</p> <p><i>Influencing skills:</i> build a large lobby of peers, superiors, subordinates, enlisting support as required; demonstrating strong negotiation and persuasive abilities.</p> <p><i>Interpersonal skills:</i> demonstrate a presence, confidence and assertiveness; convey potentially sensitive messages with empathy</p>
<b>Leadership</b>	<p><i>Challenge the process:</i> recognize and seize opportunities for change and growth; maintain cross-organizational focus; work across organizational boundaries and pursue horizontal solutions</p> <p><i>Inspire a shared vision:</i> create and impart a vision; enlist support in that vision from subordinates, customers, superiors peers and suppliers; think strategically and involve others in strategic planning</p> <p><i>Enable others to act:</i> foster teamwork and collaboration; coach and mentor-counsel others to grow personally and professionally.</p> <p><i>Model the way:</i> exemplify organizational and personal values and practices; establish a trustworthy reputation; show maturity of thought</p> <p><i>Encourage the heart:</i> inspire and motivate others to grow, personally and professionally</p>
<b>Experience</b>	<p><i>Organizational knowledge:</i> build broad-based working experience within operational, planning and infrastructural functions</p> <p><i>Business acumen:</i> develop strategic and operational know-how; take a concept of product/service through to fruition and delivery to customers</p> <p><i>Effective resource recruitment and deployment:</i> acquire necessary resources and apply these accordingly to meet business goals</p>
<b>Financial management</b>	<p><i>Fiscally responsible:</i> demonstrate ability to manage significant budgets</p> <p><i>Corporate finance understanding:</i> comprehend various financial statements as well as the processes and instruments used to manage an organization’s finances; understanding drivers of financing needs, financial forecasting, and sustainable earnings</p> <p><i>Effective application of financial factors:</i> grasp how cost/benefit analysis and depreciation considerations form part of decision making</p>
<b>Customer focus</b>	<p><i>Customer-driven strategies:</i> understand the diverse customer community and the need to adapt to product and market goals and plans accordingly; create a listening and customer responsive environment; take a panoramic view of the environment in which the organization operates and works with stakeholders to develop strategies and capabilities responsive to this environment</p>

Figure 1- CIO Qualities

Corcoran and Jones also reported the perceived gaps in competencies noted by special librarians in the corporate setting. These are seen as necessary skills that many special librarians need to obtain in order to advance in their career and become the chief information officer of the knowledge-based environment:

<b>Communication</b>	<p><i>Presentation skills:</i> present information and concepts concisely, articulately, coherently and within the audience's context</p> <p><i>Influencing skills:</i> build a large lobby of peers, superiors, subordinates, enlisting support as required; effectively negotiate and persuade</p> <p><i>Interpersonal skills:</i> demonstrate presence, confidence and assertiveness</p>
<b>Leadership</b>	<p><i>Challenge the process:</i> recognize and seize opportunities for change and growth; develop cross-organizational focus; ability to work across organizational boundaries and pursue horizontal solutions</p> <p><i>Inspire a shared vision:</i> create and impart a vision; enlist support in that vision from subordinates, customers, superiors peers and suppliers; think strategically and involve others in strategic planning</p>
<b>Experience</b>	<p><i>Organizational knowledge:</i> develop broad-based working experience within operational, planning and infrastructural functions</p> <p><i>Business acumen:</i> understand strategic and operational know-how; take a concept from inception to delivery of a product/service</p>
<b>Financial management</b>	<p><i>Corporate finance understanding:</i> understand various financial statements as well as the processes and instruments used to manage an organization's finances; understand drivers of financing needs, financial forecasting, and sustainable earnings</p> <p><i>Effective application of financial factors:</i> understand how cost/benefit analysis and depreciation considerations form part of decision making</p>

**Figure 2-Special Librarian Qualities**

Corcoran and Jones (1997) conclude their study with the following: “in reviewing these findings, we see good news and wonderful potential. We now have a much clearer understanding of the skills and experiences that librarians wanting to progress to executive positions must develop and exhibit. Equipped with this understanding, those

individuals can identify the courses, jobs and opportunities they must pursue to gain this experience” (p. 35). From these comparisons one can see that there is potential for special librarians to progress to the position of chief information officer within a knowledge-based organization if the proper skill and qualifications are developed.

## METHODOLOGY

Content analysis was chosen as the research tool for this study because it is a method particularly well suited for examining written documents. Chadwick, Bahr, and Albrecht (1984), note that content analysis is “any technique for making inferences by objectively and systematically identifying specified characteristics of a message” (p. 239). They further state that content analysis involves systematically coding messages, or the information in them, into categories, thus allowing quantitative analysis. Babbie (1999) describes content analysis as an unobtrusive social research method that is particularly well suited for analysis of communication. As a research technique, content analysis classifies and quantifies data taken from text by selected characteristics; inferences are then drawn from the results. Content analysis is essentially a coding operation that relies on effective analysis. Communications, whether they are oral, written or something other, are coded and classified according to some conceptual framework. Coding within content analysis must be clearly defined so that the subsequent analysis of information remains clear and concise.

As with any research tool, content analysis has its advantages and disadvantages. Time and money are saved because the material already exists, and one can generally undertake the study without a large research staff. An important advantage of using content analysis as a research method is that there is no need for human research subjects (Chadwick, et al. 1984). Since content analysis is a non-reactive method, no one is

interviewed and no subjects need to visit a lab. Observations can be made at the convenience of the researcher, without disturbing or influencing the environment being examined. Content analysis has disadvantages as well. Locating messages appropriate to the research question can sometimes prove difficult, and the information that is found may not always be presented in the format that the researcher would find most helpful. Babbie (1999) notes that “content analysis data is limited to the examination of recorded communication. Such communication may be oral, written or graphic, but they must be recorded in some fashion to present analysis” (p. 296). The advantages of content analysis must be weighed against its disadvantages and against alternative research strategies. Content analysis is useful for studying events and processes in social groups, as well as a useful tool for exploratory research.

The overall methodology used for this research study is modeled after the methods found in Babbie (1999). Following Babbie’s model, sampling decisions were made and operational definitions of the variables and their attributes to be examined were determined for coding purposes. Sampling decisions included where the job advertisements to be studied would be found, what time period would be used, and what the sampling units would be. While systematic analysis of advertisements in newspapers and magazines has been used for content analysis concerning job ads, this study chose to make use of the availability of job ads that are currently posted on the Internet. Hansen (1998) notes that “online recruiting, or cyberecruiting’ - a term rapidly gaining popularity among [human resources] professionals-is redefining the way HR departments are finding qualified job candidates. Used alone or joined with traditional efforts, such as

newspaper ads, radio ads, employee referrals and employment agencies, cyberecruiting adds fresh meaning to the word ‘outreach’” (p. 13). A study by Cronin, Stiffler and Day (1993), made use of traditional paper-based job advertisements. This study used content analysis of job advertisements, as well as survey responses from library school graduates and field interviews with information specialists to evaluate employment opportunities for information professionals.

Two sets of job postings were looked at for this study. Job advertisements for the position of chief information officer (CIO), were placed into one category. The other category contained job advertisements for special librarians, with a focus on jobs in the knowledge-based corporate environment. All employment ads for academic, public, children’s and private school libraries were eliminated. Also eliminated were any jobs, in both categories, which were listed as internships, part-time, temporary, and those with no specified qualifications listed. Announcements for positions outside of the United States were also discarded. A data collection sheet was devised to capture the information from the ads that were examined. A total of 70 job advertisements were examined, 35 ads for the chief information officer position, and 35 ads for the special librarian position. These ads were taken from a variety of sources, since no single source could be located that contained an adequate amount of ads with the necessary qualifications for this study. All 70 of these job advertisements were posted on the Internet within a two-month time frame of December 1998 through February 1999. The job advertisements for this study were taken from the following Internet sites:

<b>Chief Information Officer</b>	<b>Special Librarian</b>
<a href="http://www.cio.com">http://www.cio.com</a> Web site for the magazine, "CIO"	<a href="http://www.sla.org">http://www.sla.org</a> Special Libraries Association
<a href="http://www.monster.com">http://www.monster.com</a> Large multi-purpose job hunting site	<a href="http://www.lita.org">http://www.lita.org</a> Library and Information Technology Association
<a href="http://www.careersite.com">http://www.careersite.com</a> Nationwide job hunting resource	<a href="http://carousel.lis.uiuc.edu/~jobs/">http://carousel.lis.uiuc.edu/~jobs/</a> University of Illinois Graduate School of Information and Library Science job posting service
<a href="http://www.wsj.com">http://www.wsj.com</a> Wall Street Journal Interactive job postings	

**Figure 3- Internet Job Posting Locations**

The job advertisements were numbered and then analyzed line by line, with relevant content listed under four headings:

**1. Education**

This category looked at scholastic requirements for the job advertised. If the job did not mention any specific educational requirements, this was also noted.

**2. Skills**

This category contained technical skills listed in the job ads.

**3. Experience**

This aspect was generally noted in years, and also mentioned progressive skills and positions held that were a requirement for the job advertised.

**4. Qualifications**

Interpersonal, leadership, management, and organizational skills were placed into this category.

After the 70 job advertisements had been examined, it was apparent that there was a wide range of possible terms used in the ads, therefore the content analysis was not limited to a predetermined list. New words and phrases were listed as they were encountered. A data capture sheet was devised, and the terms within the advertisements that fell under the categories of education, qualifications, skills and experience were noted in the appropriate column on the sheet. Once these were listed, like terms were

examined and coded. After further analysis of all terms under the broad categories of education, qualifications, skills and experience, several narrow categories were introduced under each heading. For instance, all mentions of a BA or BS degree, in any field, were placed into one category: “BA/BS required”. The same was done for skills, qualifications and experience. The breakdown of categories follows:

<b>Education</b>	<b>Qualifications</b>	<b>Skills</b>	<b>Experience</b>
BA/BS	Leadership	Hardware/software	1-2 years
MBA	Management	Internet	3-5 years
MLS	Interpersonal	Database	5-10 years
Advanced degree preferred	Organizational	IT Management	10-15 years
No degree mentioned		New Technologies	Proven leader/working knowledge

**Figure 4- Categories of Job Requirements**

After these categories were decided upon, the coded terms from the job advertisements were organized, and an analysis was then done by looking at the number of occurrences of each term in the ads for the chief information officer position as well as the special librarian positions. From this information, charts were devised, comparisons were made and the findings of the analysis were examined.

## FINDINGS

This investigation focused on the skills, qualifications, education and experience listed in job advertisements for the position of special librarian and chief information officer. The overview in Figure 1 shows the four broad areas that were examined and presents a graphical representation of how many times each category was mentioned in 35 job advertisements for the special librarian position and 35 job advertisements for the chief information officer position. This overview shows that the skills needed to complete the job advertised was the most important factor, with qualifications for the job being the second most important factor, then education and lastly, experience.

The first major category examined was that of "Education" (Figure 2). Of the 35 job advertisements for the position of special librarian, the ALA-accredited MLS degree was required 86% of the time. The MLS degree was never mentioned in the position of chief information officer. The second most important degree mentioned was that of a BA or BS in any field. This was mentioned in 40% of the chief information officer advertisements, and mentioned in only 14% of ads for the special librarian. Mention of "advanced degree preferred" with no qualification was seen in 29% of both types of advertisements. Another notable finding was in the "equivalent experience" section: in the chief information officer ad this was never mentioned, however in the special librarian ads, this was mentioned 14% of the time. The requirement for an MBA degree

## BROAD REQUIREMENTS FROM EMPLOYERS

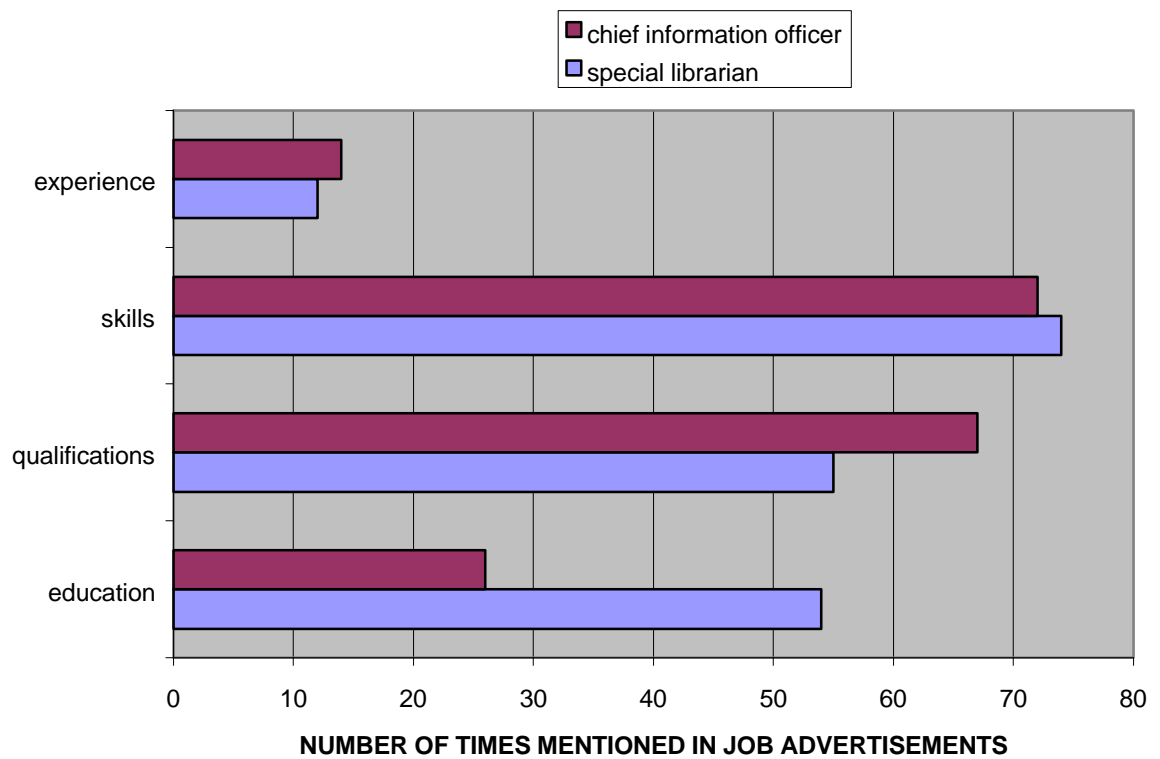


Figure 5-Broad Requirements

### EDUCATIONAL REQUIREMENTS

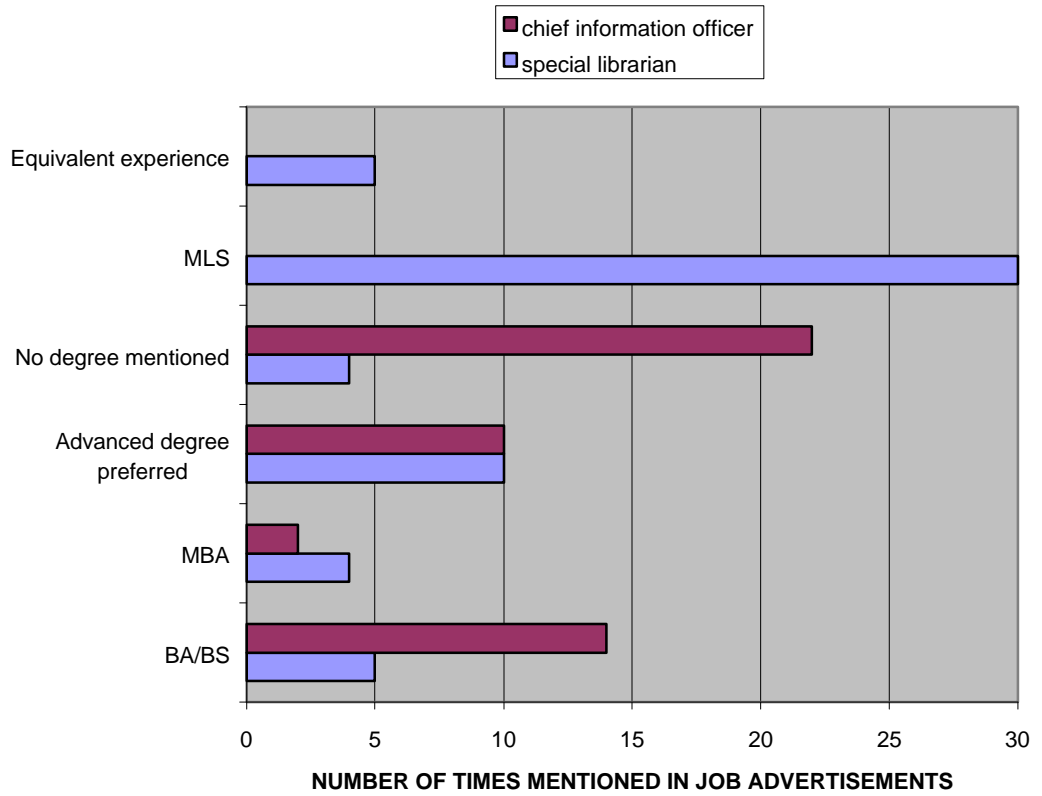


Figure 6-Educational Requirements

was mentioned in 6% of the chief information officer ads, and in 11% of the ads for the special librarian.

The second category examined was that of “Qualifications” (Figure 3). The four main headings in this section are leadership, management, interpersonal and organizational qualities. All four of these categories had a similar number of mentions for each type of job advertisement. Leadership qualities were mentioned in 40% of the special librarian ads, while it was mentioned in the chief information officer ads 60% of the time. Management skills were mentioned in 51% of both the special librarian ads as well as the chief information officer ads. Interpersonal skills were mentioned more often in the chief information officer ads, 54%, while mentioned only 46% in the special librarian ads. Organizational skills were the lowest for both categories of ads with these being mentioned only 20% of the time for special librarian and 26% of the time for the chief information officer.

The category with the largest disparity amongst the items listed was the “Skills” category (Figure 4). The largest gap was between the “hardware/software” skills required for the job. Both types of ads often mentioned multiple hardware and software skills needed to perform the job. The special librarian ads mentioned these skills 90% of the time, while the chief information officer ads only mentioned hardware/software skills 37% of the time. Internet skills were mentioned in 51% of the ads for the chief information officer and in 40% for the special librarian. Database skills were required in 11% of special librarian ads, and in 17% of chief information officer ads. Another large

### QUALIFICATIONS

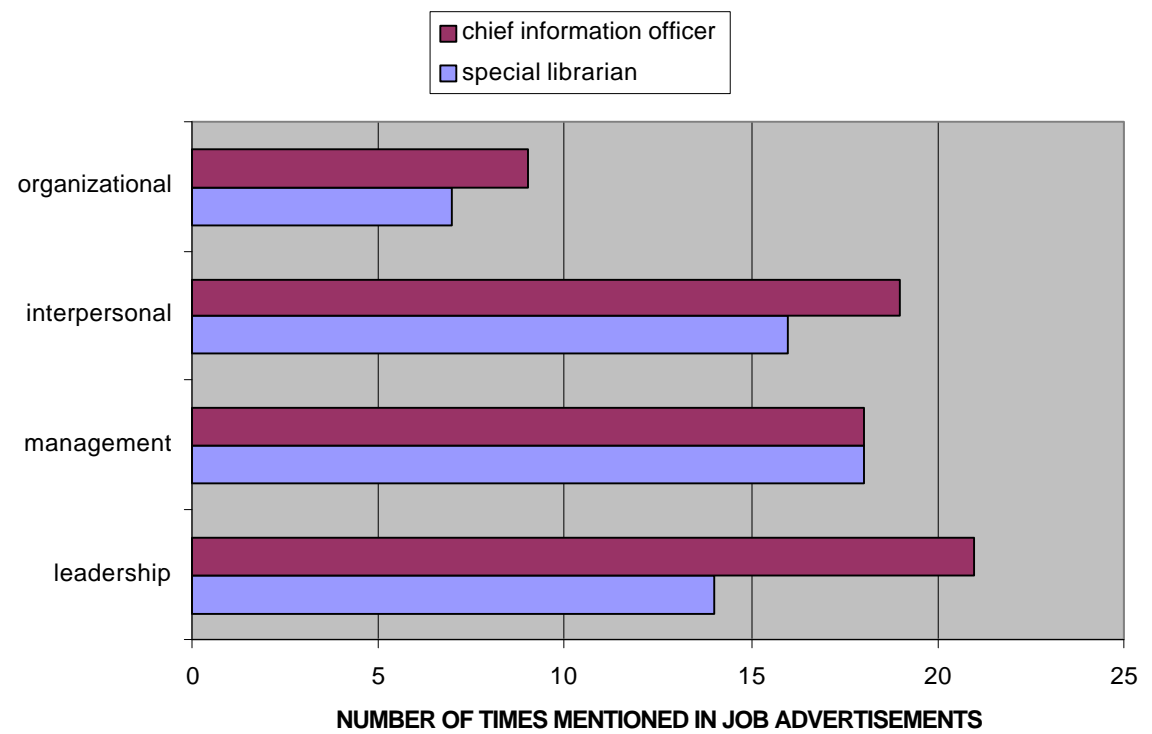


Figure 7-Qualifications

### SKILLS

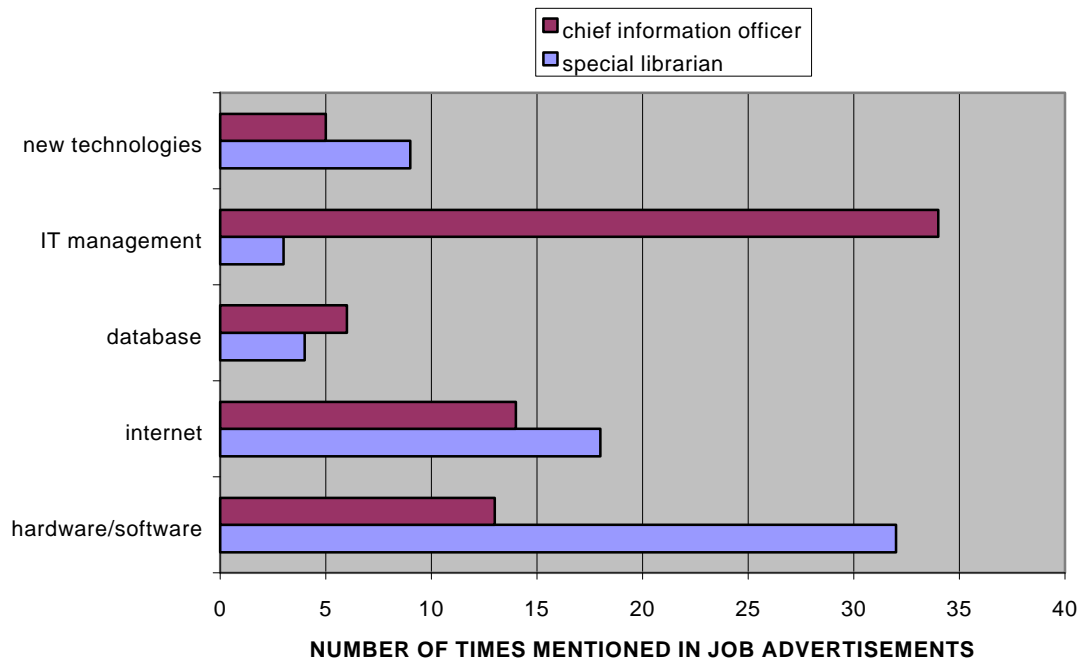


Figure 8-Skills

disparity in this category was the mention of Information Technology (IT) management skills. This skill was required in far more of the chief information officer ads than in the special librarian ads, 97% and 9% respectively. The last item under the skills category was “new technologies”. An understanding of a variety of new technologies was required in 26% of special librarian ads, and only 14% in the chief information officer ads.

"Experience" was the last category analyzed. No experience requirements were in 20% of the special librarian ads (Figure 5), and in 26% of the chief information officer ads (Figure 6). The largest category for the special librarian ads was the “5-10 years” of experience range, mentioned in 62% of the ads. The largest category for the chief information officer ads was that of “over 10 years” experience, mentioned 43% of the time. The chief information officer ads did not have any jobs available for people with less than 5 years of experience, while the special librarian ads started with “1-3 years” at 3%, then moved into “3-5 years” at 9%.

### SPECIAL LIBRARIAN YEARS OF EXPERIENCE REQUIRED

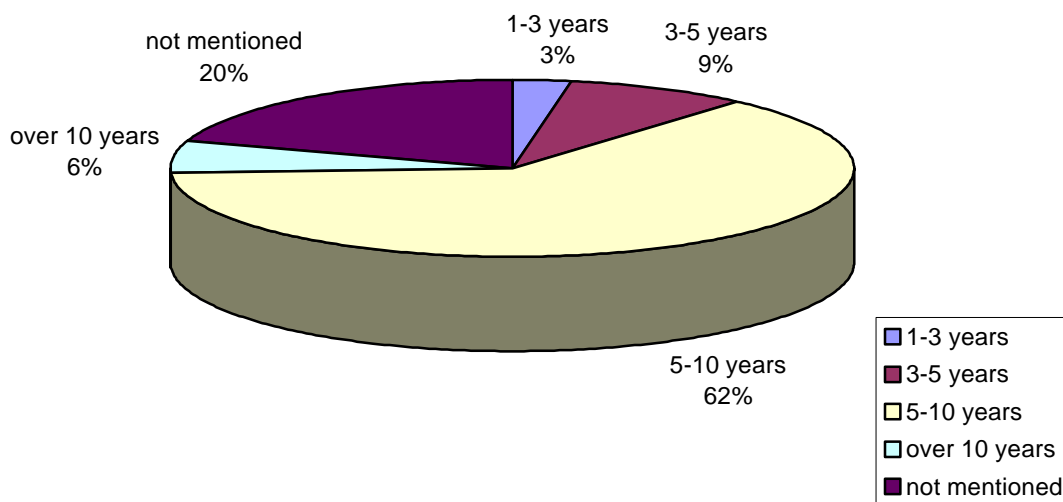


Figure 9-Special Librarian Experience Required

### CHIEF INFORMATION OFFICER YEARS OF EXPERIENCE REQUIRED

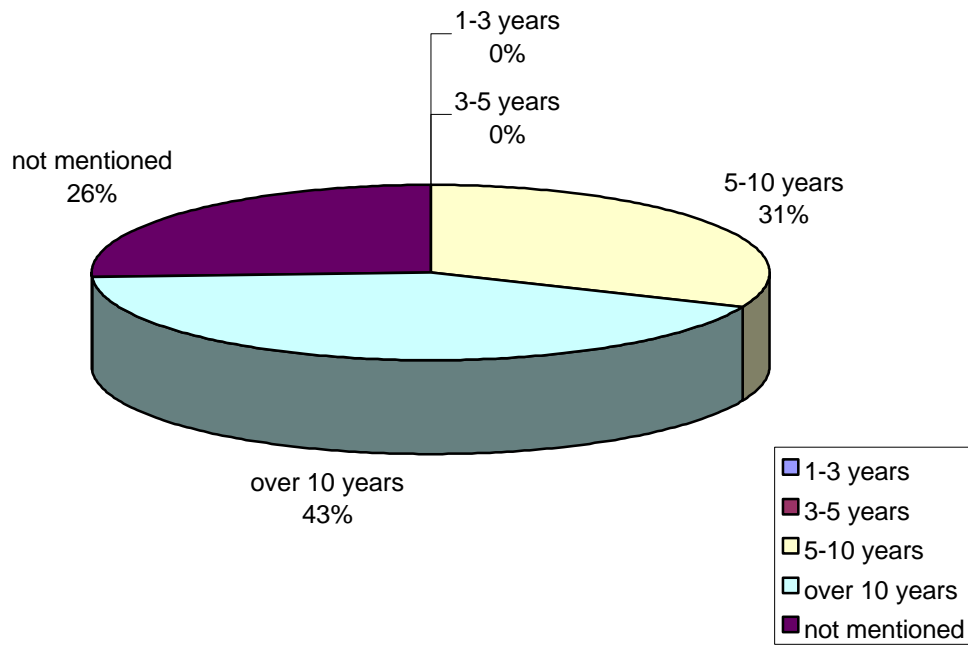


Figure 10-Chief Information Officer Experience Required

## CONCLUSIONS

This study has analyzed job advertisements for the positions of chief information officer and special librarian to determine what similar qualifications are needed to perform each job. An attempt was made to compare the two positions, both of which are responsible for the management of information, and to find out what further skills, if any, a special librarian would need to possess to advance to the executive position of chief information officer within a knowledge-based organization.

Job advertisements posted on the Internet were selected as the main source of information for this study due to their availability and timeliness. Content analysis, a research method well suited for studying written documents, was selected as an unobtrusive means to conduct this investigation. After the documents were gathered and examined, a data collection sheet was devised, and a list of variables was constructed. Collection and coding conventions were developed, and data was then entered into a spreadsheet. Data was classified into four broad categories, and then further broken down into narrow sub-categories. After analysis, the data in the spreadsheet files was transformed into graphical representations.

The four major categories examined were education, skills, qualifications and experience. Of the four headings, the largest disparity in the number of times a category was mentioned in the job advertisement was in the area of education. Of the 35 ads for the special librarian position, educational requirements were listed 54 times, while in the ads for the chief information officer position, education was mentioned only 26 times.

This disparity can be explained by looking at the experience category. For the chief information officer position, experience is more important than actual degrees held. While the advertisements for the special librarian position mentioned experience almost as many times as the chief information officer ads, the executive position required a *minimum* of five years experience, while the special librarian positions sometimes fell within the 1-3 years of experience timeframe. For the position of the special librarian the ALA-accredited MLS degree was mentioned more than any other degree, and was the most frequently specified criterion in the job announcements. Somewhat surprisingly, the advanced degree of an MBA was mentioned twice as often in the special librarian ads than in the chief information officer ads. The conclusion from these statistics is that a special librarian would benefit from having an advanced degree, however, to reach the executive position of chief information officer, experience is the more important factor.

The category labeled “qualifications” was composed of such items as leadership, management, interpersonal and organizational skills. The chief information officer position advertisements mentioned leadership, interpersonal and organizational skills slightly more than the special librarian ads. The skill of management was mentioned 18 times in the ads for both categories. The conclusion can be made from these statistics that both positions value these skills on a very similar level. According to the job advertisements analyzed, the special librarian and the chief information officer need to possess very similar skills in the area of “qualifications”.

The skills category was another area where there was some disparity between the two job categories. While both of these professional positions are required to work with manage information, the skills needed to be a special librarian in a knowledge-based

organization are more stringent than those needed to be the chief information officer. Hardware and software skills were needed in the special librarian position far more than they were in the chief information officer position. Information Technology (IT) Management skills were mentioned in many more of the chief information officer ads (34) than for those of the special librarian (3). Management skills in the area of Information Technology are more important to the chief information officer position than the hardware and software skills needed to actually run and manage information systems.

The overall conclusion derived from this study is that special librarians can certainly make the leap to the executive position of chief information officer in a knowledge-based organization if they gather enough experience and work on improving their Information Technology skills. The other requirements that were studied in the job advertisements for these two position point out that the skills needed to be a successful special librarian are very similar to those needed to be a successful chief information officer. Both positions are in the business of managing information and leveraging it as a corporate asset, therefore it seems logical that a special librarian should strive to reach the top executive position in the area of information management by gathering experience and constantly updating skills and qualifications.

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THE SPECIAL LIBRARIAN AND THE CHIEF INFORMATION OFFICER:  
A COMPARISON OF SKILLS AND QUALIFICATIONS

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