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NUWC-NPT Technical Document 10,315
30 March 1993

AD A264 198

Proceedings of the 36th Military Librarians Workshop, 27-30 October 1992

Command Support Department

Naval Undersea Warfare Center Detachmen
New London, Connecticut

93-07892

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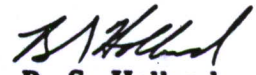
93-4-14-149

PREFACE

This document was compiled by the Library Division (Code 026) of the Command Support Department (Code 02) under job order 702C08.

REVIEWED AND APPROVED: 30 March 1993



B. S. Holland
Commander, U.S. Navy
Head, Command Support Department

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

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1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	30 March 1993	Proceedings

4. TITLE AND SUBTITLE

Proceedings of the 36th Military Librarians Workshop, 27-39 October 1992

5. FUNDING NUMBERS

PR 702C08

6. AUTHOR(S)

Command Support Department

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Naval Undersea Warfare Center Detachment
New London, Connecticut 06320

8. PERFORMING ORGANIZATION REPORT NUMBER

TD 10,315

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Naval Undersea Warfare Center Division
Newport, RI 02841-5047

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

This document contains the papers presented at the 36th Military Librarians Workshop, 27-30 October 1992, hosted by the Naval Undersea Warfare Center Division, Detachment New London.

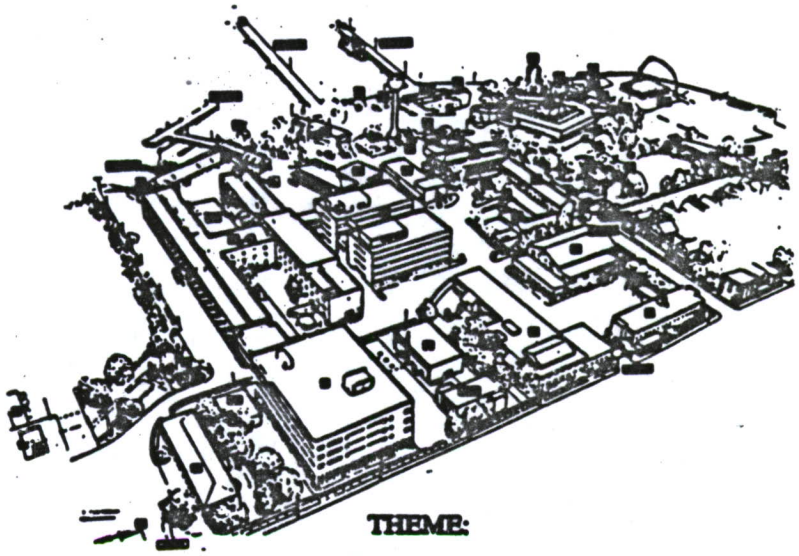
14. SUBJECT TERMS
Military Librarians Workshop

15. NUMBER OF PAGES

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	SAR

36th
MILITARY LIBRARIANS WORKSHOP
27 - 30 OCTOBER 1992



THEME:

NEW AGENDAS FOR THE NINETIES

HOST:

NAVAL UNDERSEA WARFARE CENTER DIVISION, NEWPORT
DETACHMENT, NEW LONDON

NEW LONDON, CONNECTICUT

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FOREWORD

The main theme of our workshop was how to deal effectively with the "New Agendas For The Nineties." These new agendas encompass concepts such as downsizing, consolidation, and realignment. These new agendas came about due to the sinning of the Cold War and the defeat of Communism. How ironic this is since in the past, the victors were given the spoils and not expected to downsize, consolidate or realign.

The program committee had a unique opportunity in planning this workshop. Because the last Military Librarians Workshop was held in New England in 1969, we felt we had available a pool of untapped New England library resources. Mary Barravecchia was able to call upon her library school mentor, Professor James Matarazzo of Simmons College to be our keynote speaker. Professor Matarazzo was willing to speak on just about any topic we wanted him to speak on. The committee decided that with the advent of total quality management and the constant comparison with the Japanese in a competitive arena, that he should talk about his trip to Japan and his analysis of Japanese Corporate Libraries.

Committee members would like to thank our Commanding Officer, Captain Robert L. Mushen, for his welcoming address and for making available all of the Division's facilities and resources to support this workshop.

I would like to offer a special thanks to the two other members of the program committee, Mary Barravecchia and Lorraine McKinney. They were responsible for doing everything from making hotel reservations to helping me pick and wash apples on weekends. This workshop would not have been possible without their physical and emotional help.

Finally, I would like to concur with Serge Campion's recommendation to dedicate this workshop to Normand Varieur, our past chair. I met Normand at a serials workshop in Atlanta some twenty years ago and I have never met a man with such a dedication to his work and to his fellow professionals. During the planning of this workshop and the execution of that plan, Normand was in constant contact with the program committee and gave us great direction. It is extremely rare to find people who constantly give all of their energy for the common good.

David R. Hanna
Head, NUWCDIVNPT Library Division

PRESENTATION TO MILITARY LIBRARIAN'S WORKSHOP 27 OCTOBER 1992

by Captain R. L. Mushen

Good morning. This gathering has a truly international flavor. In addition to our 14 visitors from Canada, we have DoD representatives from Germany, Sweden, Panama, and Japan in attendance. So, may I add Bon Jour, Guten Morgen, God Morgon, Buenos Dias, and O-hi-o Go-zi-mas.

For those of you visiting this part of the United States for the first time, I must say that you have chosen the perfect time of year. It might be hard to sell you one of our icy Januarys or blistering Augusts, but we can boast with unrestrained pride about our New England October. It's cool and crisp and colorful.

I'm very happy that your organization has chosen the Naval Undersea Warfare Center Division Newport to host the 36th Military Librarians Workshop. The scientific and technical information field has undergone dramatic changes in this era of the computer revolution. As professional librarians meeting the challenges of modern technologies, you must be very excited at the prospect of substantive information exchanges with your colleagues.

There is a story about a 16th century librarian who defined his profession by saying that one must be diligent and quiet. Then he added, by way of reminder to his master, the Emperor, that if not of noble blood, he should be given a title to underscore the dignity of his office. Diligent and quiet can't begin to cover the required talents of today's librarian. But our 16th Century friend was "right on the money" when he said that librarians should receive special honor for the important function they perform. It is for that reason I am most happy to welcome you, and I guarantee that the Naval Undersea Warfare Center Newport Division, your host activity, will treat you in a most noble fashion.

I would like to tell you a little about your host activity. We are a division of the Naval Undersea Warfare Center (NUWC), which was officially established in January 1992 as a result of the Department of Defense consolidation efforts: NUWC has two major divisions: Keyport, Washington Division, on the west coast (the former Naval Undersea Warfare Engineering Station). And our Division, based in Newport, Rhode Island, of which New London is a part (the former Naval Underwater Systems Center). The Newport Division has 15 field sites and undersea test ranges at locations throughout the United States, as well as in Canada and the Bahamas. All of these sites together support 8000 employees.

As I said, NUWC is a new organization and we have a new mission: "to operate the Navy's full-spectrum research, development, test and evaluation, engineering and fleet support center for submarines, autonomous underwater systems, and offensive and defensive weapons systems associated with undersea warfare." In a nutshell, if it has anything to do with systems that conduct undersea warfare, it comes under our charter.

We are very proud of our organization, proud of our role in undersea warfare, and also very proud of the heritage of the entire Warfare Center. I have a particular fondness for the New London Detachment, perhaps because in the 1980's I spent two years there as Officer in Charge when it was part of the Naval Underwater Systems Center -- Newport Division's predecessor.

I understand you will not be visiting the actual Fort Trumbull site in New London during your stay here. As a tourist attraction, Fort Trumbull might not be considered particularly spectacular. But at the laboratory at Fort Trumbull, some truly spectacular events in sonar weapon research and development have taken place there during the last 50 years. I'd like to say a few words about them.

The New London Laboratory as we know it today, had its origins in 1941, when two laboratories were established to conduct research on the nature and behavior of underwater sound energy. The first laboratory, established on the present New London site, was the Columbia University Division of War Research. A sister organization known as the Harvard Underwater Sound Laboratory was established at the same time in Cambridge, Massachusetts.

The Columbia installation concerned itself with the developing passive detection devices, some of which were first used in the antisubmarine warfare phase of World War II in the Pacific. The highly successful sono radio buoy and submarine-installed listening sonars were developed at the New London site. Harvard University research, on the other hand, directed its attention to active antisubmarine warfare sonar development of the scanning type. It was there the word "sonar" (sound navigation ranging) originated.

In 1945, the sonar portion of the Harvard Lab was merged with the Columbia Lab at New London, creating the Navy Underwater Sound Laboratory, where sonar research and development continued for 25 years. In 1970, the "Sound Lab" merged with the Torpedo Station in Newport, RI, to create the Naval Underwater Systems Center. The new Center continued its work in sonar, with major breakthroughs in the area of towed array development. Weapon-related research and development conducted at our Newport Laboratory also brought about major achievements for the Center in the area of advanced capability torpedoes. As I said earlier, under a 1992 reorganization we became Undersea Warfare Center

Division Newport, where we are continuing with our tradition of excellence. John Merrill, a senior manager emeritus of New London, will share some historic facts about Fort Trumbull a little later this morning. I believe you will find them interesting. It's important to not to forget past achievements.

But our main focus must always return to the future. It is impossible to predict what the library of the future will be. But for the scientific and technical information field and indeed for all areas of government, it will be a resource-constrained environment.

1 We will be operating under a reduced budget

2 In light of that fact, you must develop new operating techniques

3 And in spite of that fact, you must maintain accessibility and user confidence

There will be a continued pressure on the Federal budget. Much of that pressure will be borne by the DoD. And in today's geo-political environment, even the once protected R&D budget will not escape the cuts. That is a fact we must face. It is the natural result of our recent international successes.

Nearly everything we do in the future will be driven by budget -- by the cost of getting the service. The topics listed on your workshop agenda reflect this fact -- how to manage in "lean times" how to operate in a "downsizing" environment.

As I said, the pressure will be on. It will be hard to keep our libraries, our information programs, from falling victim to this pressure. But we must continue to try by diligently and forcefully marketing new programs to all levels of management.

We must refocus our view of the library and its mission. We have come a long way from the archival tradition. Yesterday's function was to collect, based on probable use. Today, the function of a modern library is to manage data -- receive, store, sort, recall . . . data. The library is no longer autonomous. It is no longer administratively and programmatically isolated. R&D technology is taking phenomenal strides forward and information sciences must be an integral part of that progress. Our military libraries must be brought onto the team that works for mission success.

Libraries are only as good as the access to them is good. They can not be just a repository of information that the user cannot easily access. The good thing is that the information retrieval systems of today are powerful and efficient. But, at the same time, the computer revolution that made these more efficient information retrieval systems possible, also resulted in the burgeoning of the data to be retrieved. The volume of data

continues to increase and will increase at a greater rate now that the barriers between East and West have broken down. For example, much Russian technical literature will become available to the United States. We are already sharing in some scientific experiments. Russians have recently conducted some tests at one of our unique test facilities. At the same time that you must ensure easy access for the user, there will be massive storage requirements. The engineers and scientists who use your libraries are suppliers as well as customers. Teamwork is a key tenet of Total Quality Management. It is a symbol of the unified commitment of each element to quality standards. Networking, sharing of resources, and teamwork are the operatives of today's library.

I know you don't need to be reminded of all this. You must face these realities on a daily basis. But please remember that many of us know what you are dealing with, and appreciate how you are managing -- or should I say surviving -- in this uncertain environment. I hope this conference will serve to create new and useful alliances, reinforce pre-existing ones, and in general provide new spirit to meet the scientific and technical information challenges you will continue to meet in the future.

A story is told that Americans first discovered the importance of library science to the national defense during the Revolutionary War, when a small group of colonists, having run out of ammunition, rammed their hymnbooks into cannons and fired them at the British. There is some reason to doubt the complete truthfulness of this story, but the point I'm making is this. I spoke a few minutes ago of the critical role our Center plays in the U.S. national defense strategy by developing and building major undersea weapon systems. But what are the weapons that really keep us free? the torpedo Mk 48 that NUWC's designs and develops? the Patriot missile? the M-1 rifle? These certainly are important weapons in the nations arsenal; however our scientific and technical knowledge is our strongest, most enduring and -- in the final analysis -- ultimate weapon. The simple fact is that our national defense capability depends on the capability and accessibility of our technical information resources.

THE VALUE OF INFORMATION IN JAPANESE CORPORATE LIBRARIES

by James M. Matarazzo, Simmons College GSLIS

PURPOSE OF THIS STUDY

Information is an important part of doing business in Japan. A colleague and I traveled to Japan to study and to identify the approaches of Japanese firms in managing, acquiring, and disseminating the kinds of information they feel contribute to their success. The plan was to provide insight, perhaps for the first time, on the unique methods of information management at the exceptional firms selected for the study.

ORGANIZATIONS INVESTIGATED

In order to understand how the Japanese manage information, the investigators decided to focus on the corporate libraries and information centers in eight large organizations. The firms whose information practices we examined include:

Nomura Research, Toshiba, Sumitomo Marine and Fire Insurance Company, Nissan, NTT, Japan Development Bank, The Marketing Data Bank of the Japanese Management Association, and IHI Heavy Industry.

FINDINGS

During the course of this study, the authors found that these information centers play a substantial role in managing information within their organizations. Indeed, the libraries we visited collect, store, and disseminate information - and information is a highly valued resource in Japan.

Many of the problems which confound information systems researchers in the West, such as how to determine the value of information, are far less important in Japan. Since firms there place a high value on information, and since senior management has determined that there is value in having an excellent information center, information is considered a cost of doing business, and these information centers are well supported and heavily used.

It is a practice at many Japanese firms to rotate management through a variety of functions. The management of the information center is rotated in this fashion, and we believe this is a further indication of the high value placed on information. It provides management with direct, first-hand knowledge of the value of information and its use, as well as a

close view of the economics of information provision and distribution. In addition, by including libraries and information centers in the management rotation, it reinforces the importance of these limits.

Unlike many U.S. firms at which we have worked and studied, we observed many senior executives in Japan reading in their corporate libraries and information centers. During the course of our interviews at these firms we were assured that top management are frequent users. Many of the firms we visited have very heavily used information centers, and at several, every seat in the library was occupied.

Each of the information centers we studied was closely aligned with the strategic thrust of the firm. These libraries and information centers are designed and staffed to support the firm's direction. At one firm, where sales are key, 97 percent of the staff effort in the information center is directed at supporting salesmen in the field.

What the executives and managers at these firms have done is first to determine that information has value and second to make arrangements for the provision of information. Perhaps especially important, individuals in these firms share information. Much of the sharing is funneled to the library and the information center, evaluated and distributed to everyone at the firm. Thus, the reward system is structured to encourage information-sharing for the benefit of the organization as a whole.

This system makes maximum use of internal, external, and shared information. It certainly makes it easy for everyone at these organizations to exploit information. Executives and managers have taken responsibility for their information needs as well as those of their own staffs and have established appropriate mechanisms to meet these needs.

These firms manage information. In the U.S. information management and information technology are often misunderstood. While technology has changed the way information can be acquired, stored, and distributed, it is a tool that assists in the management of information in Japan. The crucial point is that the information is the focus in Japanese libraries, and not the technology.

While the technological applications are highly prized in these firms, the value of information technology is in its application to the management of internal and external information. Thus, information management is not viewed as a subset of a technological function.

IMPORTANCE OF THIS STUDY

As our economy becomes even more competitive internally and globally, the need for external business and scientific information will increase. As the technology is easier to use, organizations will channel their energies toward the management

of information and how it is best managed for success.

The authors believe that the models provided by Japanese corporate libraries and information centers are capable of adaptation to the U.S. Indeed, we present our findings to managers, especially information professionals, with an eye toward helping them become better information managers and develop effective management practices for information within their organizations.

IMPLICATIONS

For Western firms, especially American firms, there are a number of implications which can be drawn from this study. These are:

- Information management involves focusing on relevant information that is generated outside, as well as inside, the organization. The value of this information is often found in its timeliness, relevance, and effectiveness in advancing organizational goals.

- While Japanese culture encourages effective information management, firms in the West can improve their own information usage by establishing processes and policies for better managing all their information resources.

- There is little value in trying to cost-justify information management practices, since information is a necessary cost of doing business in today's global environment.

- Information services should deliver specific products and services tailored to the needs and strategies of the organization and not strive to be all things to all people.

- Executives and managers need to take responsibility for their own information needs and establish internal operations for meeting these needs.

As Peter Drucker recently wrote:

> We are just beginning to raise the vital question "What information do I need, and in what form, and when?" I am not suggestint that we ignore developments in hardware and software. But I am saying that, increasingly, hardware and software are going to be less important than the use we make of them defining and exploiting information.

Peter F. Drucker, "Viewpoint: What Executives Need to Learn" (Cambridge, MA: Arthur D. Little's PRISM, Fourth Quarter, 1990): 73-84.

For more information see:

Lawrence Prusak and James M. Matarazzo, Information Management and Japanese Success (Washington, DC: Special Libraries Associatin, 1992).

This research project was sponsored by Special Libraries Association, Ernst & Young, Disclosure Incorporated, Lord Corporation, and the Emily Hollowell Fund of the Graduate School of Library and Information Science at Simmons College.

MANAGING IN LEAN TIMES

by David W. Lewis, Head, Research and Information Services Department, Homer Babbidge Library, University of Connecticut

INTRODUCTION

I am pleased to be here. First, because a year ago *Library Journal* published an article I had written entitled "Eight Truths for Middle Managers in Lean Times". Any of you who have published know it is always a bit of a rush to see your name and ideas in print, especially after a good copy editor has had at your prose. But it is a special honor when what you write strikes a chord and results in invitations, like the one you have extended to me, to speak to colleagues and peers. So I thank you for the honor you have extended me this morning.

Secondly, it is always enjoyable to talk to groups away from home where you can pretend certainty about issues that befuddle you on a day-to-day basis, and you suggest truths without having to live up to them.

My talk this morning is entitled "Managing in Lean Times". I must confess that I don't know much about military libraries. My experience has been wholly in academic institutions. I will talk this morning from that perspective. I suspect, but do not know, that we have much in common. I hope you find my remarks useful.

I work for a state university less than a hour's drive from here. In case you haven't heard defense and insurance are Connecticut's two major industries. Neither is doing particularly well. I don't know if the nation has suffered through a recession for the last few years, but there is no doubt that my state has. In that last three years my library has lost 15% of its positions — nearly 20 people. Most were to early retirement, but when the governor was banging heads with the unions, we sent out lay off notices. This week the talk is of another six million cut out of the university's budget for next year. The last several years have been a difficult ones. Unfortunately, when I see my friends and colleagues from other states and other parts of the country, their stories are similar. No library I know of is doing well.

But as I see it, the current economic situation is only part — and probably the less important part — of our current problems. If we view the problem as simply surviving a temporary economic downturn, I fear that we will miss finding the answers we need. The first important thing I want to tell you this morning is that today libraries would be facing lean times even if our country were not in the midst on an economic recession. We, for better or worse, find ourselves at a moment in history that would challenge us regardless of the fiscal strength of the governments and communities that fund us.

Knowledge, or at least information, has become a commodity, and the perveying information has become a major industry. The technologies that have served us well for a hundred years are being replaced and we are all struggling to preserve the best of the old, and at the same time are desperately trying to find the means to invest in the future. The possibilities are confusing, both to us and those who fund us, and no one has enough money for both the new and the old. This dilemma is the true cause of the pressures we feel, and it is to these circumstances that we must respond.

This morning I would like to do two things.

1. First, I will outline the organizational realities that libraries and librarians currently face.
2. Secondly, I will suggest what I think we must do if we are to successfully confront this situation we find ourselves in.

It is funny, but even though I work for a state government that has been battered over the last several years. On most days I am an optimist. I have come to believe that the difficulties and dilemmas we face today will in the end make our libraries better, more effective, and more important organizations. And in the end we will find our jobs more satisfying. Unfortunately, I have also come to believe that the road from here to there will be difficult, and frankly not much fun.

PART ONE: THE ORGANIZATIONAL REALITIES

The organizational realities as I see them are four:

1. The tools of our trade are in the midst of radical transformation.

2. If you don't change the way you are doing things, the quality of what you do will decline.

3. Declining organizations continue to decline.

4. The only way to get resources is to convince the people with the money that what you are doing is important.

Let's look at each of these realities in turn.

THE TOOLS OF OUR TRADE ARE IN THE MIDST OF A RADICAL TRANSFORMATION

I don't want to dwell to much of this, because to me at least, it is an obvious truth. William Arms, the vice-president for academic services at Carnegie Mellon University was quoted in the *Chronicle of Higher Education* two months ago as saying, by the end of the decade "all science and engineering publications will be available electronically. A first-class science and engineering library without paper will be possible then." I don't know — but I am not betting against it.

Think about the changes in your own career. In 1978 Wilfred Lancaster published *Towards Paperless Information System.* That year I set up the first online search service at Hamilton College. We subscribed to BRS. Today my library's CD-ROM LAN is more powerful that BRS was then. I do today on two 386 LAN servers and a couple of dozen

workstations I do what fifteen years ago was done by one of the most powerful search systems in the world.

We all know the scholarly journal system in paper is a dinosaur. I learn more about my professional world from listservers than from journals . And the Internet is our frontier. As my favorite sage Paul Simon says, "these are days of miracle and wonder." Some times I walk through my reference area in awe at the tools I can put before the students and faculty at my university. Sometimes it seems to me to be magic.

IF YOU DON'T CHANGE THE WAY YOU ARE DOING THINGS, THE QUALITY OF WHAT YOU DO WILL DECLINE

This is a fundamental truth about all organizations. There is a popular bumper sticker, which I have noticed increasingly is finding its way into the offices of friends and colleagues, that says, "If all else fails lower your standards." The important thing to understand is that if you don't change the way you are doing things when either resources are declining or when demands are increasing — and if you are like me you are currently living with both — then the standards, the quality of your services, will decline whether you like it or not. This is not something you can choose. It is not a matter of free will. Quality is what will go — period.

This is not hard to understand. You can't do more the same way with less. The hard thing is to remember this on a daily basis, especially if you are in a small operation, where the failure reflects on you personally. You will just work a little harder. We'll just do this one more thing. It will work. You may get away with for a week or a month, but over the long haul you will come up short. In time, things will slip. You won't have time for quality. Standards will decline. It will happen. It is inevitable. And it will not be your choice. If you so not change the way you work, quality will decline.

DECLINING ORGANIZATIONS TEND TO CONTINUE TO DECLINE

Again, I take this as a fundamental truth all about organizations. Once decline begins, the organization will spiral down. Maybe slowly at first, but it will continue and before long it will be noticeable. In libraries the important reason for this is that we are service organizations. The most important resources in a service organization is staff who care about the public and the quality of what they do. As decline begins, these staff will feel it. They will know that they can not do the job for the users the way they did last week. It this situation they end up explaining failure rather than assisting with success. This not fun, and the people who can will go, and those who are left will "burn out".

Very quickly the users and the funders notice that your not doing the job the way you did and when push comes to shove you get a little less money. And so it goes —down and down. A little less money and the the decline continues. Importantly, in these times if you are not advancing, you are declining.

THE ONLY WAY TO GET RESOURCES IS TO CONVINCE THE PEOPLE WITH THE MONEY THAT WHAT YOU ARE DOING IS IMPORTANT

I use to say that there was no more money, but this is not really true. Universities, towns, and even Northeastern states, and certainly the federal government have money. The problem is that they don't have enough money to do what everyone thinks is important.

This means that you better be doing important things — very important things. And you better be doing them well. And the people with the money better be noticing.

There probably was a time when being a "good" thing was enough. But if there was, it is gone. Today you need to be able to show how you made a difference — specifically. Marketing, public relations, and lobbying are not unimportant, but what really matters is that you are getting the job done.

So, where are we. The truth is that:

1. If we don't change in the face of declining resources and increasing demands, quality of what we do will decline.

2. And if quality declines, it will continue to decline.

3. And if you are not doing important things well, you will not get any additional resources.

4. And the technologies you thought you understood are changing, and the means that once guaranteed the end, may not get you there any more.

Depressing? Yes. I hope my title didn't lead you to believe that this morning's talk would be uplifting affair.

My rule of thumb these days is that I have to have either money or leadership. Since I don't have much money, leadership is required. What I will talk about in the time I have remaining is simply good management practice, good leadership. I would probably make the same recommendations if we were to gather again in good times. The important thing to understand about our current circumstances is that today we don't have any choices.

Let me give you a laundry list of suggestions.

PART TWO: RULES FOR MANAGING IN LEAN TIMES

1. YOU HAVE TO CHANGE

You can't just go about business as you have done in the past. None of us can. It is probably a good thing — one of the redeeming aspects of contemporary librarianship — that we have no choice. The situation we are in forces us to move when we might otherwise be hesitant. Like Butch Cassidy and the Sundance Kid, we will find that jumping off the cliff is really not difficult when there are no alternatives.

I would argue you need to have some of your resources dedicated to change — to new programs. I don't care what you have to give up to make this possible. New programs and better ways of doing things are what growing organizations are made of. Put aside 10% or 20% of your resources for new programs or to invest in changes to current operations. Make one of these new ventures your highest priority. If the verb in any of our top five goals for this year is "maintain", you are in trouble. You're not growing. And if you don't grow you will die.

Of equal importance is the need to change to demonstrate that you are in control, that you have the power to shape what you do. It is the only way to empower yourself and your

staff. If you can't do anything else, move the furniture. If you don't like the way it looks move it back. Change is empowering, in these times you need to be empowered to survive.

2. STAY FOCUSED ON WHAT MATTERS MOST (DO IMPORTANT THINGS)

Since you won't have the money or the staff to do everything and you gave up our truly unimportant activities a long ago, you have to stay focused on what matters most. The things that are important.

This is very different than deciding what are the less important things that you will give up. A strategy that focuses on the what to give up will not work. Everything you try to forego will have a defender who will fight to the bitter end for what you hope to avoid doing. Rather what is required is to decided positively what you will do well. Get that done and don't worry about the other things you don't get to.

Doing important things is only possible if you know what matters most. To know what matters most you need to know who you are, who your clients are, and what they think is important. Every book on successful business strategy ever written says defining what business you are in is critical. It is. You need to get to know your users. It is what they need that is truly important. Most of us don't know our users very well.

Let's have a show of hands —

- How many of you have conducted focus groups of library users in the past year?
- How many of you have conducted "exit" interviews with users who are leaving your institutions in the past year?
- How many of you have done a user survey or questionnaire or a transaction log study of your online system in the past year?
- How many of you are certain you know what your users want?
- How many of you are certain you know what they need?

What does this tell us?

I will digress a little here to tell you what I know for certain about library users. By the time users come to they have exhausted all other alternatives. They are desperate. They have asked all of their friends. They have check their reprint files and their book shelves and have come up empty. No one goes to a library first when they need information or an answer to a question. I bet you don't and I know I don't. Why is this so?

It is so because libraries are time consuming and difficult to use, and most importantly because the results of investing time in using a library are uncertain. Studies of the accuracy of responses to reference questions repeatedly find that 50% to 60% correct responses is what libraries deliver. Availability studies repeatedly show that 40% to 50% of the documents that users seek are not available, even though most of the documents are owned by the library. If you have never done an availability study, I strongly recommend it, but it is not for the faint of heart.

The combination of at uncertain result and the time investment required to use a library means that the information sough needs to be very important and there needs to be no other way to get it before using the library is a sensible thing to do. As librarians we invariably undervalue the users time. In academic and public libraries we generally ignore it entirely. But I suspect it is true in other places. More importantly, we almost never see the

uncertainty in the way our libraries work, or understand how this uncertainty compounds the investment needed to produce a result. I wager that if you listen to your users they will tell you these things.

So much for the digression. Now back to the laundry list.

3. GET AND KEEP CONTROL OF YOUR RESOURCES

This has two parts. The first is that you have to have control of how you spend the budget that is allocated to you. If you have a budget, but you can't spend it the way you want to, its not your budget. You need to have flexibility. If you can only spend your online budget online and your book budget only on books, you don't have enough flexibility. These days you need room to maneuver. Fighting to gain discretion over resources is one of the most important battles you can wage.

The second part is that you have to be willing to brake with past practice. Remember that you have choices and that all of your choices have opportunity costs.

The opportunity cost of a project is the value you might have generated if you had done something else with the resources required for the project you choose. You should always be aware of what you might have done that would have of more value to your users. I find it valuable to list all of the things I might do; figure out which ones will give my users the most benefit, and work down the list until I run out of time and money. Another approach is to stop before you sign off on any invoice larger than $500 and ask explicitly, "Is this most important thing I can do with this money?" If it is not, do the other thing.

Even these days most libraries do have a fair amount of money. Not enough to do everything, but there is usually enough to do at least some of the important things. The hard part is to decide to do the truly important things and to give up what is established, but which provides less benefit.

4. DON'T HEARD CATS

This is also a resources issue. I have a colleague who likes to say that managing librarians is like trying to heard cats. It's an interesting image. You don't have to be a "cat person" to imagine the confusion and chaos and humorous helplessness of trying to get a dozen felines headed in the same direction. I suspect everyone who has managed independent professionals must, at least occasionally, feel this way.

But think about a pride of lions on the hunt. Its a very different image. Now some may say that the pride works effectively because all the males have been left at home. I don't know, but I prefer to believe that the pride functions effectively because the groups goals have been internalized by the individuals in the group. The talent and energy of each individual is direct toward a common aim. This is that way a library staff — or any group of professionals — needs to function if they are to be effective.

As a manager of professionals one of your most important tasks is to get the professionals who work for you to internalize the goals of the library. Then you can leave them alone confidant that they will exercise their professional judgement in ways the will further the work of the organization.