1987

Strategic Planning For A Special Library

Donald A. Guerriero
Nova University, guerriero.biz@cox.net

This document is a product of extensive research conducted at the Nova Southeastern University College of Engineering and Computing. For more information on research and degree programs at the NSU College of Engineering and Computing, please click here.

Follow this and additional works at: https://nsuworks.nova.edu/gscis_etd

Part of the Computer Sciences Commons

Share Feedback About This Item

NOVA UNIVERSITY CENTER

FOR COMPUTER-BASED LEARNING

Major Field Project Signature Form

I certify that I have read and am willing to sponsor this Major Field Project submitted by: DONALD A.GUERRIERO. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Field Project for the degree of Doctor of Arts at Nova University.

Nov 25, 1987
(date)

John A. Scigliano
Dr. John A. Scigliano
MFP Advisor

I certify that I have read this document and in my opinion it conforms to the acceptable standards for a Major Field Project for the degree of Doctor of Arts at Nova University.

Nov. 24, 1987
(date)

Esther E. Horne, Ph.D.
Dr. Esther E. Horne
Local Committee Member

This Major Field Project was submitted to the Central Staff of the Center for Computer-Based Learning of Nova University and is acceptable in partial fulfillment of the requirements for the degree of Doctor of Arts.

Nov. 24, 1987
(date)

Barry A. Centini
Dr. Barry A. Centini
Central Staff Committee Member

STRATEGIC PLANNING FOR A SPECIAL LIBRARY

by

Donald A. Guerriero

A major field project

submitted in partial fulfillment of the requirements

for the degree of Doctor of Arts

Nova University

January 1987

ABSTRACT

STRATEGIC PLANNING FOR A SPECIAL LIBRARY

The Technical and Management Information Center of the
U.S. Defense Communications Agency is a special library
providing worldwide library and information services in
the subject fields of communications, electronics,
command and control, and computer sciences. A project
was designed with the objective of developing a strategic
plan for this library. Long-range and strategic planning
methods commonly used in business organizations were
used. An extensive review of the literature on strategic
planning was done to determine the best methods available
for use in a special library environment. The methods
used to develop the strategic plan included: writing a
plan-to-plan, four factor strategic analysis, WOTS-UP
analysis, vulnerability assessment, capability profile,
vulnerability analysis, key results analysis, and
hierarchy of values analysis. The result of the project
was a written strategic plan that included a summary
statement, mission statement, background information,
assumptions, objectives and strategies, schedules and
evaluation, and contingency plans. The conclusion was
reached that strategic planning methods used in business
can be applied successfully to special libraries,

although the process can be time-consuming. The literature review, methods used, and final plan provide a model for managers of special libraries interested in developing their own strategic plans. The major difficulties encountered were the amount of time necessary for the planning and the difficulty of integrating staff and management in the process. The motivated manager of a special library should, nevertheless, be able to plan strategically using methods disccussed in this project.

TABLE OF CONTENTS

ACKNOWLEDGMENTS

This project is the culmination of three years of study at Nova University and work with the Defense Communications Agency. A list of people who helped me during those years would not even begin to express my thanks. This acknowledgment, therefore, only includes the names of a few people who went far beyond my expectations in providing guidance or support for this study, and my entire three years at Nova University, where I learned much more than the technical aspects of Information Science. For those not listed by name, I hope that I have already thanked you for your efforts and that you know that I appreciated everything you did.

Grateful appreciation is due to my professors and advisors at Nova University. Dr. John Scigliano and Dr. Barry Centini were particularly helpful, not only in the academic work required to complete this project and my doctorate, but their unflagging good humor and willingness to help at all hours of the day and night, weekends, and holidays included, for over three years. Their truly pioneering work in the computer-based learning environment, as yet unheralded, gave me and others the opportunity for

My thanks especially to Dr. Mary L. Broad, my supervisor, and
her wonderful staff in the Employee Development Division.
Dr. Broad backed me throughout my work and study and showed
by example how a truly good manager works.

Librarians at the DCA Technical and Management
Information Center, Grace Aitel, Roberta Babbitt, Joan
Brassfield, Margaret Martinez, Mary Jane Steele, and Marilyn
Valone contributed as well. Their professional work and
willingness to challenge, to change, to take on new tasks and
responsibilities, and their dedication to our profession and
mission made it feasible to work on a strategic plan in the
Technical and Management Information Center. Walter Davis,
who worked with me while he was himself starting a second
career through college study, showed me how much a person can
accomplish while still maintaining good humor and promoting
teamwork.

Coming from a fairly large family must have kindled my
interest in planning. My mother, late father, brothers and
sister all deserve to be acknowledged as early influences on
my scholarly pursuits and need to plan and to persist over
the long run. Hopefully, I can pass on to others the same
degree of enthusiasm for learning.

Finally, the support of my wife, Chichi, and daughter,
Regina, made everything come together. None of this work
would have been done without their support. They deserve

more thanks than these few lines convey. Chichi and Regina cheered me on throughout my studies and put up with my many hours of night and weekend study, ill-humor, and too many hours in front of my computer. Rather than complaining, they provided the moral support needed in what is unfortunately often a solitary endeavor. This paper is dedicated to Chichi and Regina.

PREFACE

During the summer of 1986 the U.S. Defense
Communications Agency (DCA) released me from my regular
assignment as the Library Director of the DCA Technical and
Management Information Center to pursue full-time studies at
Nova University, Fort Lauderdale, Florida. This opportunity
was the result of my selection for the competitive, long-term
training, "DCA Honors Program." During my sabbatical in Fort
Lauderdale, and Reston, Virginia, I was able to complete the
research and writing of the major part of this report.
Revisions and editorial work were completed after August,
with the final report being submitted in January 1987.

Nova University's Doctor of Arts in Information Science
program is a field-based program of the Computer-Based
Learning Center that began regular classes on November 4,
1983. The program is based on Nova's fifteen years of
successful field-based programs for graduate students, but
derives its uniqueness through the extensive use of computer-
based learning. Students, professors, and subject experts
are joined together in a world-wide packet network using
Nova's VAX-11/780 host computer, running 4.2 BSD UNIX.
Students and professors have 24 hours a day, 7 days a week
contact over this network and also meet in small groups,

periodically, with guest lecturers for intensive weekend seminars. The entire doctoral program is designed to be completed in three years and requires students to be professionally employed in a library, information or media center, or related activity. Satisfactory completion of six major courses lasting six months each, four practicums, seminars, online conferences, and other learning activities are required of all students, as are final examinations in all courses and a comprehensive examination covering the entire three years of study. The final requirement is the Major Field Project (MFP) that is the Nova dissertation requirement. Students are required, under the direction of a faculty committee, including a local reader, to design a research project that will contribute substantially to the work of their organization and improve practice in the field of library and information science.

As the Library Director of DCA for about 3 years I came to believe that the greatest need for our organization was the development of a strategic planning process that would contribute to the survival and growth of an organization that I consider important to our national defense. The DCA Technical and Management Information Center is the only organization totally concerned with providing library and information services in the area of military command, control and communications; a field of increasing complexity and

importance to the strategic and tactical operations of armed forces throughout the world. I wanted this project, in however small a way, to contribute to the national defense.

The help of the Defense Communications Agency and various individuals is acknowledged above, but my individual responsibility for the project should be made clear. The design, research, and writing of the project is completely my responsibility and is unofficial and unclassified. All opinions and ideas, not directly attributed to a source, are my own. No agency or official of the U.S. Government is responsible for, or has given approval or disapproval to the research design, implementation, or conclusions drawn in this project.

SUMMARY

STRATEGIC PLANNING FOR A SPECIAL LIBRARY

Providing information services to about 4000 employees
of the U.S. Defense Communications Agency (DCA) is the
primary mission of the Agency's Technical and Management
Information Center (TMIC). The TMIC is a special library
that provides worldwide library and information services,
primarily in the subject fields of communications,
electronics, command and control, and computer sciences.
Using traditional reciprocal library cooperation the TMIC
also provides some reference services to other government
agencies, industry, academia, groups, and individuals.

Studying planning methods used in business and applying
these methods to the development of a strategic plan for the
TMIC was the purpose of this project. Through a variety of
business-oriented planning methods, a strategic plan for this
special library and a model for strategic planning for other
special libraries and information centers were developed.

In 1983 the Agency combined four libraries into the
present Technical and Management Information Center.
Management also reduced the authorized staff of librarians,
while allowing the Library Director reasonable discretion to
organize and direct the new unit and to determine its future.
This authority provided the opportunity to improve the DCA

library system. The Library Director, with general guidance from management, set priorities, organized and directed its efforts, and worked to maintain the TMIC at a survival level, while seeking out all possible avenues for improvements. Increasing production, automating, marketing the available services, staff training and high performance standards were unwritten strategies used to assure meeting this immediate, primary goal (survival) of the TMIC. From the beginning, however, the need for long-range or strategic planning was recognized and this project sought to begin that planning process.

Three major research questions were addressed. First, to what extent was the literature on strategic planning relevant to special libraries and the DCA Technical and Management Information Center? Second, were methods available that could be used for the strategic planning of the Technical and Management Information Center? Third, how could the results of the strategic planning process be implemented?

The strategic plan written, and the process for further development, included a summary statement, mission statement, background information on the library, assumptions, objectives and priorities, a schedule to execute and evaluate the plan, and a contingency plan. Using an extensive review of the literature on strategic and long-range planning in the

project, added to the eventual success of the planning process. Instruments used were strategic four factor analysis, capability profiling, WOTS-UP analysis, vulnerability analysis, vulnerability assessment, hierarchy of values analysis, and compilation of key result objectives.

Problems encountered that deserve further study were (1) the difficulty in starting the process, (2) the time necessary for the planning, and (3) the need for better methods to involve staff and higher-level management in the process. Nevertheless, the project showed that a motivated manager can write a strategic plan under less than optimal conditions. This project provided a model strategic-planning process that can be used to save planning time and encourages further study in the management of special libraries and information centers.

CHAPTER 1

Introduction

Established by direction of the Secretary of Defense on May 12, 1960, The Defense Communications Agency (DCA) is a separate agency of the Department of Defense (DoD) under the direction, authority, and control of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence). DCA also responds directly to the Chairman, Joint Chiefs of Staff, on communication operations and requirements related to joint planning that are of primary concern to the chiefs.

Performing systems engineering for the Defense Communications System (DCS) is part of the mission of DCA. This system must be planned, improved, operated, and maintained by DCA. The system is to be managed in an effective, efficient, and economic way to meet the long-haul, point-to-point, and switched network telecommunications requirements of the National Command Authorities (NCA), the Department of Defense (DoD) and, as authorized and directed, other governmental agencies.

DCA also provides system engineering and technical support to the National Military Command System (NMCS), Minimum Essential Emergency Communications Network (MEECN), and the Worldwide Military Command and Control System

(WWMCCS), as assigned. The Agency performs system
architecture functions for current and future Military
Satellite Communications (MILSATCOM) systems and ADP support
to the Joint Chiefs of Staff, Secretary of Defense, and other
DoD components (U.S. Department of Defense 1-3). Each year
the Director of the Agency provides general planning guidance
through the distribution of the Director's Planning Guidance.

Background and Significance

The Technical and Management Information Center (TMIC)
of DCA is a special library located at the Headquarters of
the Agency. Within the Agency organization, the TMIC is a
branch of the Employee Development Division and is headed by
a Library Director. The immediate supervisor of the Library
Director is the Director of Employee Development. The
Employee Development Division and its branches, included the
TMIC, are functionally within the Personnel and
Administration Division of the Agency.

The TMIC provides different levels of information
services to about 4000 DCA employees at Headquarters, field
activities, and field organizations, including the White
House Communications Agency and Defense Commercial
Communications Office as outlined in the Defense
communications Agency Missions and Functions publication
(U.S. Defense Communications Agency, Missions and Functions).

As a result of the specialized, but dynamic subject
fields, the TMIC is often called upon to assist, through

informal networking and traditional reciprocal library
cooperation, the other federal government agencies, DoD
organizations, defense contractors, libraries and information
centers, and the public. The degree of such service and
cooperation is largely dependent on the resources of the
TMIC, but it is an important component of the work.

Statement of the Problem

Since 1983 the Technical and Management Information
Center was faced with critical structural and resource
problems as a result of the consolidation of four DCA
libraries into the TMIC. At the same time, the staff was
reduced to three permanent, full-time professional librarians
without clerical support. The Agency provided minimal
guidance on how the organization should be organized or
operated, nor did it provide information on what was
considered important work to be continued with the available
staff. As a result, the newly appointed Library Director,
and the immediate supervisor, the Director of Employee
Development, undertook to set priorities, organize, and
operate the TMIC on the basis of incomplete information and a
perceived need to both maintain the organization at a
survival level and lay the groundwork for improved
performance.

Careful management of the available technical,
financial, and human resources and dedicated, hard work by
the remaining staff resulted in the achievement of those

initial goals. The TMIC was improved by instituting many changes including increased automation and better procedures to provide improved customer services. Some of these improvements are detailed in reports of Guerriero.

The Library Director, and the immediate supervisor, convinced Agency management of the requirement to authorize the hiring of additional temporary staff and to change position descriptions of existing staff to meet today's information needs. In August 1986, the TMIC had four permanent and two temporary professional librarians positions and two temporary, part-time library and information science graduate students. Some additional people were available for clerical and routine work during the summer months. All temporary and part-time positions, however, were in serious jeopardy of being terminated.

That strategic planning was critical to the survival and growth of the DCA Technical and Management Information Center was recognized by the Library Director and the Director of Employee Development who encouraged such planning. Strategic planning is probably essential in any library or information center, regardless of its size, but the special library may need it even more as a result of its vulnerability to cutbacks in staffing and financial resources. A strategic plan for the DCA Technical and Management Information Center was needed to consolidate gains made and to influence the development of the TMIC. Decisions about the allocation of

resources, hiring, patron service priorities, expansion, and automation all needed to be made within the framework of a strategic plan.

The purpose of this applied research project was to develop a strategic plan for the DCA Technical and Management Information Center. The plan was to be presented to management and to the staff of the TMIC for review and further work to improve the plan and to organize operational plans for agreed on objectives.

How do managers of special libraries plan strategically? Henry Mintzberg in his study, The Nature of Managerial Work, (1973) asks "What do managers do?" This apparently simple question, said Mintzberg, is asked of managers " ... by their children, by the staff specialists who work for them, and by the college students who hope one day to replace them." Mintzberg notes that one could read all the relevant literature on the subject and finally emerge with the ability to cite the recent literature and still not have an understanding of what do managers really do.

Through empirical research, Mintzberg's study shows the nature of managerial work in terms that any manager, at any level will recognize and understand. Among the many insights afforded by his research is the development of ten roles that are common to the work of all managers, including people with titles such as supervisor, field sales manager, president, dean, department head, and archbishop. Of these roles the

"most crucial part of the managers' work involves the strategy-making process of their organizations." This powerful role was as likely to be found in the lower echelons of the hierarchy as the higher. Except perhaps in highly bureaucratic organizations where almost no freedom is provided, the manager, who is willing to face the constraints of the job, also has the opportunity to exert influence over the job and organizational operation of the unit.

Is it possible for the managers of special libraries to plan strategically the future of their organizations? Unless the answer is yes to that question, any special library existing today has an uncertain future at best. With the obvious turmoil present in government, business and not-for-profit sectors of society, special libraries might be expected to continue to exist in some form, but not always in the most effective one for the library or parent organization. Without strategic planning, the survival of the library will be predicated on either luck or perhaps the plans of someone other than the library manager. The special library manager of today should have the skills and tools necessary to accomplish strategic planning.

The special library manager needs to be concerned with the strategic planning process in the library. The future of the library, its contribution to the parent organization, the working conditions and richness of the careers of the staff depend, to a large extent, on strategic planning.

Perhaps, more than some professions, that of the librarian in a special library has more potential to contribute directly to the mission of the parent organization. The information age has brought forth a flood of data and information that presumably has value to knowledge workers in almost any endeavor. No one is surprised to hear or read the lament that it is now, more than ever, difficult to keep up with the information being generated in most any field. There is no coincidence in the conjunction of the recent information explosion and research into areas of computer science, such as artificial intelligence. These continuing technological efforts are attempts to supplement or, better yet, replace human intervention in the process of converting data and information into usable knowledge. While this research shows promise in some areas, human analysis of information continues to be required if the true value of the information is to be the desired output of any information system such as a special library.

Special libraries are information systems that have evolved to take as their input information from numerous sources in their environment, process this information with human intervention, and provide output that will be used as input into other systems. A simple example might be the work of the special librarian searching for scientific references at the request of an engineer. The librarian determines the

engineer's requirements, identifies sources of information that appear to be relevant to the engineer, obtains the source material or references to it, transmits this information to the engineer and perhaps conducts further searches as a result of feedback. The engineer might then use the knowledge obtained from this material to conduct research involving the primary mission of the parent organization. Viewing the library as a complex system and set of subsystems, partly controlled by the library manager, helps to conduct an analysis of the policy of the special library and to investigate some methods of strategically planning for the effective operation of this information system.

Returning to Mintzberg's original question, "What do managers really do?" and ours, "How do managers of special libraries plan strategically?" We know that (1) managers at all levels of most organizations do plan for the future of those organizations and (2) that managers of special libraries are within the general group of those that can do this type of planning. This applied research project used business-oriented strategic planning tools to develop a strategic plan for the DCA Technical and Management Information Center.

Research Questions

The purpose of this applied research project was to develop a strategic plan for the DCA Technical and Management

Information Center. Three research questions were addressed
in completing the project.

Research Question I.

To what extent is the literature on strategic
planning for organizations relevant to the DCA
Technical and Management Information Center?

Research Question II.

Are there methods available in the literature
that can be used for strategic planning for the
DCA Technical and Management Information Center?

Research Question III.

How can the results of strategic planning for the
DCA Technical and Management Center be implemented?

Hypotheses

Based on the research questions, preliminary reviews of
the literature, pre-testing some strategic planning methods,
and observations of the operations of special libraries and
similar organizations the following three hypotheses were
considered.

Hypothesis I.

    A strategic plan for the DCA Technical and
Management Information Center can improve
significantly its work.

Hypothesis II.

    Strategic planning methods designed for, and
commonly used in business, can be adapted for
use in the DCA Technical and Management
Information Center.

Hypothesis III

    A strategic plan designed for the DCA Technical
and Management Information Center can be
implemented successfully through input from
management and staff.

Definition of Terms

For the purposes of this research the following definitions were used.

Librarian - A professional concerned with the acquisition, organization, and transfer of information. Usually the professional librarian holds an advanced degree in library science.

Manager - The person considered to be in charge of the special library. The manager has responsibility for planning, organizing, directing, and evaluating progress, among other duties.

Special library - A library that is normally part of a larger organization and that has a specific function for that organization. Special libraries are found, for example, in government agencies, businesses, member groups, and the like. Excluded are public and college libraries. Special libraries are sometimes referred to as information centers or may have similar names.

Strategic planning - formal analysis of the resources of the organization and of its environment to determine the actions necessary, in the present, to try to influence the future.

Technical and Management Information Center - The name given to the DCA special library. Often referred to as the TMIC.

Limitations

There are several limitations to the study.

(1) Limited time and financial resources for the widest possible survey of existing primary and secondary literature.

(2) Lack of time and resources for significant interview or survey research.

(3) Non-availability of the parent organization's management for participation in the study.

(4) Non-availability of the Technical and Management Information Center staff for participation in this stage of the development of the plan.

(5) Need to develop a strategic plan that is both unclassified and did not include sensitive data that cannot, as matter of law or regulation, be released to the public.

At the time of the research, there was a serious lack of useful statistical data and analysis of the special library's current operations and no resources available to change this condition. Furthermore, there was uncertainty about the wider environment the special library and the parent agency operated in. National political, economic, and military policies were changing rapidly and in a state of uncertainty making planning difficult.

Assumptions

The primary assumption was that the special library of
DCA, the Technical and Management Information Center, is a
significant resource to the Agency and to national security.
Secondly, it was assumed that literature on strategic
planning would be readily available, not only to the
researcher, but to most special librarians. Moreover, it was
assumed that there was a reasonable likelihood that a useful
strategic plan for a special library could be developed using
methods employed in business. It was assumed that the
library manager could develop the plan and once developed
there would be an opportunity to test implementation by
presenting it to one higher level of management in the parent
organization. Furthermore, it was assumed that a plan
developed by the library manager could be further enhanced,
with the participation of the library staff, into an
operating plan for the near future.

CHAPTER 2

Review of Related Literature

In his landmark study, <u>The Structure of Scientific</u> <u>Revolution</u>, Kuhn (1970:17-18) writes that the development of a scientific discipline is based on shared paradigms by persons committed to the same rules and standards for scientific practice. Prior to the acceptance of a paradigm there may be a body of literature that is based on observation and the collection of data. Some of this information will eventually be useful, while much will simply disappear. The body of knowledge remaining after the post-paradigm stage is the result of specialization. To be accepted as a paradigm, a theory must compete with others in the same field, but it does not necessarily, in fact never does, explain all the facts it is confronted with.

Kuhn also says that when scientists can take a given paradigm for granted it is no longer necessary to start from first principles and justify every concept introduced. This is left to the text book writers. The individual researcher can now take the text book and apply the research to specific situations in an effort to develop new knowledge and better methods. Kuhn (1970:23-24) describes this process as "mopping-up operations." This he calls "normal science" and

notes that the success of the paradigm is dependent on its promise to help solve other problems.

Scientists, Kuhn continues, engage in three types of research.

(1) Increasing the level of precision, reliability and scope of previously known facts.

(2) Demonstrating in nature that which has been stated in theory.

(3) Empirical work undertaken to articulate the paradigm theory.

When a paradigm is present, it is not necessary, according to Kuhn (1970:42-50), to have "rules," but the scientist must be willing to scrutinize some aspect of nature in great detail. This should result in clarification and refinement of both technique and theories. The search for "rules" is more difficult than that of determining a basic paradigm to use in a discipline. Scientists may agree on a paradigm without attempting a full rationalization or interpretation for it and will base research upon it.

The review of the literature concerning strategic planning supports Kuhn's statements. The paradigm for strategic planning in business, government, and not-for-profit organizations is well-developed and available for use by information scientists concerned with improving the

management of information. Empirical research is possible
using knowledge already available to demonstrate the
application of theory to practice.

Planning strategically in libraries, however, at least
according to the literature, is far behind that in other
areas. A fairly extensive selective bibliography on
information management published in Special Libraries by
Wright (1982: 298-310) showed a lack of important references
to strategic management. Riggs (1984) appears to have been
the first to write a text book for strategic planning in
libraries. The latter, however, is addressed primarily to
large libraries, rather than to strategic planning in
special libraries.

The literature reviewed, therefore, was almost entirely
related to business strategic planning and concentrated on
what would appear to be useful to an information scientist
concerned with managing information in a special library
setting. This did not limit the research, however, as there
is a large body of such material.

By 1976, for example, Hofer (1976:281) was able to
discuss over 109 major research studies on strategic
planning. The literature today includes many more studies.
Hofer was critical of both the duplication of effort in some
studies by researchers who apparently were not familiar with
earlier work and by the lack of attention paid to non-
business enterprises.

The real challenge in using the literature on strategic planning in business in planning for a library is separating the wheat from the chafe. This literature review identified well over 200 books and articles with some potential as sources of ideas and knowledge for planning in the special library. About 100 of these sources were read carefully and found to be useful in varying degrees. Of these 100, over 50 were found to be particularly helpful. Many other sources, not cited in this report, contributed to the background research for strategic planning. These include material, not only on strategic management, but in other fields as well. The information scientist conducting strategic planning for a library will use material on research methods, computer science, library and information science, general management, leadership, psychology, and public administration. For this study many unpublished archival materials were referred to, as were published sources in telecommunications, automation, national defense, and the entire area of command, control and communications.

The modern paradigm for strategic planning seems first evident in the work of Chandler (1966). Writing that the top management of an organization makes broad strategic or entrepreneurial decisions as it has final say in the allocation of resources people, money, and materials, he also notes that sub-units plan strategically to try and capture

resources. Managers who fail to plan strategically, clearly, according to Chandler (1966:14-15), fail to carry out their responsibilities.

Studies on the organization of planning in a small company while not as plentiful as one would like, are available. Steiner (1979:25-30), in a landmark book, suggests that the small company manager needs to have a pragmatic understanding of strategic planning in general and for a small company in particular. This information can be obtained through literature, consultants, professional seminars, and visiting other companies doing planning. He suggests taking a simple approach to the planning including the identification of weaknesses, opportunities, threats, and strengths underlying planning (WOTS-UP). He also calls for the identification of strategies to exploit opportunities and avoid threats. The evaluation and selection of strategies is a necessary step in the process.

To implement plans, Steiner says, it is necessary to put objectives in some priority order, to determine the mission, purpose, philosophy, and long-range goals of the organization. Associated plans for staffing, financing, facilities, etc. can be developed as necessary. Plans must be monitored for performance and recycled annually. This type of planning is done by the manager with inputs from

reading and personal contacts. Feedback is obtained through service, production, and budget reports and from the staff.

One of the best overall views and normative studies on strategic planning is the work of Steiner (1979). Pointing out, among other things, that action is all important, he cautions against putting too much effort into planning-to-plan. Significantly, Steiner provides a useful framework for planning in small business that is useful as a model for planning in a small library. Whitterker (1979) in another excellent book suggests that in the small organization planning can be done at the top or by an outside consultant. Marketing in the not-for-profit sector is an important element for the special library and is thoroughly covered by Lauffer (1984). This book should be considered "required reading" for information scientists concerned with the survival of their organization or service, as the case may be.

The prolific writer of management texts, Peter Drucker, has, not surprisingly, contributed a vast amount of information in many books and articles. Drucker describes strategic planning as formal, analytical thinking and the "futurity of present decisions" (1973: 123-125). He specifically notes that strategic planning is not the elimination of risk, but making risk-taking decisions in a systematic way. He writes that the future must be considered

in present decisions, as should the efforts that will be
needed to carry out today's decisions.

In a theme he refers to in many other contexts, Drucker
(1973: 126) writes that all planning starts with getting rid
of all old programs that are not necessary. The first step
in planning, he says is to ask what can be stopped and what
activities the organization would not start if it was not
already in it now. This single theme, if kept in mind, can
make planning an easier process by keeping in the forefront
of the planner's thinking the need to allocate resources.

The failure of strategic planning to produce results is
attributed to the inability to change internal structure to
meet environmental challenges, according to Ansoff (1965: 42-
43). He provides an exceptionally useful theory of the need
for the organization to move from the "competitive" mode to
the "entrepreneurial" where areas of opportunity in the
environment are required. Drucker (1969: 103-105) also
writes that planning is a process of continual monitoring of
a changing environment to manage change. If change is not
managed, it will manage the organization.

Treating not-for-profit organizations as environmental
serving organizations (ESO), Ansoff (1979: 8-9) writes that
the distinction between profit-making and non-profit (i.e.
government) is blurred. The work of the ESO can be termed
"entrepreneural", "operational," and marketing. The
entrepreneural and marketing work, taken together, make up

the strategic work of the ESO. From the viewpoint of
society, the value of the ESO, profit or not-for-profit, is
based on two major questions. First, how well do the
products and services respond to the needs of the customers?
Secondly, What is the efficiency with which the ESO uses
resources in supplying needs?

Looking outward to the environment is stressed by many
strategic planners as one of the essentials of the process.
Drucker (1973: 86) provides the starting point, oft repeated
in his and others' writings, that it is necessary to find the
answer to three questions. First, what is our business?
Second, what will our business be? Third, what should our
business be? The answers to these questions determine the
strategic plan of the organization and they are found, not in
the organization, but in the organization's environment. The
scan is done by looking outward to the environment.

In his book, Managing for Results, Drucker (1964: 5-11)
writes that results and resources always exist outside the
business, not inside. Results are obtained by exploiting
opportunities, not by solving problems. Allocating resources
is done by determining the opportunities that exist in the
environment that will help the organization. Cohn and
Lindberg (1974: 14-45) also stress shifting the planning
focus from the perspective of the manager to the customer or
environment. Ansoff (1976) Lauffer (1984: 130-135),

Rowe, et al. (1985), Kastens (1977:47), and Linneman and
Kennell (1977) all provide useful tools to conduct an
analysis of the organization's environment.

Finally, some evidence that all the research pays off
for a small business, at least, is reported in Dollinger
(1985: 24-30). A reading of Toffler's, Future Shock (1970) and
The Third Wave (1980) provide the information scientist with
a broad look at future events that will have an impact on the
science.

The internal structure of the organization and internal
audits occupy a considerable part of the literature on
strategic planning. Mintzberg (1980:69) theorized that
structure will follow strategy and that setting out too
detailed plans in a bureaucracy is dangerous as this tactic
can result in the bureaucracy carrying out THE PLAN with a
vengeance to whatever is its final conclusion. He likens the
bureaucracy in this case to an elephant.

Mintzberg (1979) describes in detail, and with unusual
clarity, his organizational theory, based on empirical
research. Much too rich and useful to summerize here, it can
only be pointed out that his research shows there are five
broad types of organizations. These are (1) The simple
structure, (2) The machine bureaucracy, (3) The professional
bureaucracy, (4) The divisionalized form, and (5) The
adhocracy. Each type has five parts: (1) The operating core,

(2) The strategic apex, (3) The middle line, (4) The technostructure, and (5) Support staff. Mintzberg specifically excludes libraries from the support staff, that does include functions such as supply, building maintenance, printing, security, mailroom, and legal. Instead the library is included as part of the operating core whose members perform the basic work related directly to the production of products and services. The operating core performs differently in each type of organization and may be done away with completely in adhocracies where project management and highly changing technical operations are the norm. Mintzberg further elaborates in a case study of a single adhocracy (1985) and sythesizes the research in an article, "Structure in 5's" (1980)

Planning strategy, according to Mintzberg (1973: 42-53) is usually found in one of three modes. The "entrepreneural" where there is a strong leader and a desire or need (such as a declining business) for a bold and proactive stance. This mode is dominated by an active search for new opportunities. The "adaptive mode" finds the organization making ad hoc decisions as it is caught up in complex political forces and where there is no central decision making. There is reactive solution to problems, rather than a proactive search for solutions. Decisions are made in incremental, serial steps. In the "planning mode" planning is done in anticipation of

the future. It focuses on systematic analysis and the "integration of decisions and strategies."

The "entrepreneural mode" may be the only one available to an organization in trouble as it has little to lose by acting boldly. Problems exist when a sub-unit is in a different mode than the parent organization and it is best to be able to move from mode to mode as crises and opportunities come up.

Drucker (1964: 130-140) writes that three time-tested methods have been used by businesses to build great organizations. First, they started with a "model" of the "ideal business." Next, they maximized opportunities by focusing available resources on the most attractive possibilities and devoting them to obtain the greatest possible results. Finally, resources were maximized so that opportunities were found, if not created, that endowed quality resources with the greatest possible results.

Steiner writes (1979: 123) that there is no single method to conduct the internal audit of an organization. The database necessary for the audit should include information on expectations from outside constituents, past performance, forecasts, expectations from inside the company, and on the current situation. Managerial intuition, judgement, and values are required in assessing opportunities, threats, strenth, and weaknesses. The situation audit leads directly to the development of the organization's mission, objectives,

strategies, and policies. Short-range plans and budgets are developed to attain specific objectives and implement strategies and policies.

Since the volume of information that can be collected is immense and must be continuously gathered, Steiner further suggests limiting the task to the information required and provides a useful method to do the audit (1979: 129-135).

The need for self-analysis is also emphasized by Whitterker (1979: 15-25) who writes that the first requirement is to have a very precise definition what the organization's business is. This should be done by someone who knows the organization, has a detailed knowledge of the industry, and of the parent organization.

Ansoff (1970: 40) provides a useful comparison between the "competitive" and "entrepreneural" organization that is helpful in the analysis of both the parent organization and the sub-units. A lack of compatibility between styles could prove to make planning difficult for both. The possibility of innovating is also thoroughly discussed by Pinchot (1985) and Kanter (1983). While both are primarily concerned with the role of top management in large corporations, they provide the special library manager with insight on ways to judge performance of the library and the parent organization.

Finally, Drucker (1964: 143, 147, 167-168) writes that there are three categories of efforts in an organization.

First, high priority - where the real push is made and real
opportunities are. Second, high priority opportunities to
abandon, to not do. Third, one large, heterogeneous group of
also-rans where nothing can be gained. Abandoning the old,
worn out activities is necessary, but not easy, as every
proposal to abandon will be opposed. The most common excuse
will be, "we must grow." Sometimes there are simply not
enough resources available for even the high priority
opportunities. In that situation Drucker writes that the
only solution is to "jump." Gradual growth from within will
not be possible and in business the alternatives are to sell
the company, acquire another in the same business, or merge.

Objectives

Defining objectives for an organization follows the
internal audit, environmental scan and the definition of the
mission. Whitteker (1979: 35-37) says objectives are
synonomous with goals, are set from top down, measurable,
specific, have a hierarchy for different divisions in the
company and bridge the gap between long and short-range
planning.

Defining objectives first requires definition of the
problems you are dealing with, according to Lauffer
(1984:155). These may be in three categories. The first are
those concerned with a particular population such as staff,
patrons, or resources providers. The second category of
problems are those concerned with service delivery or some

part of the service system that is unavailable, inaccessible,
ineffective, inefficient, or unresponsive. The third type of
problem involves those lodged in relationships between
providers, between suppliers and providers, or between
providers and consumers. These relationships are
characterized by a lack of resources, lack of continuity, or
lack of comprehensiveness.

Drucker (1973: 99-100) provides the classic list of
areas that must be addressed by objectives. There are eight
and they must be addressed and priority must be given to
those where survival is at stake. The required key areas are
listed below.

- Marketing
- Innovation
- Human Organization
- Financial Resources
- Physical Resources
- Productivity
- Social Responsibility
- Profit Requirements

Objectives must lead to work and assignments, be flexible and
help to allocate resources. Drucker (1974: 5-19, 59) gives
many details on how to apply these concepts.

Cohn and Lindberg (1974) argue that objectives,
decisions, and strategy must be based on survival of the

business. While growth may be essential, it is necessary to make decisions based on whether or not the decision contributes to survival. Risks taken must be weighed against survival. Small firms should focus on the near future rather than the distant, althoUgv2they may have long-term objectives.

Many others have written on the various aspects of objectives. Some of the better books and articles, besides those already mentioned are Ansoff (1965: 52-57), Ullrich (1976:209), Toffler (1970:14), Kami (1969:108), and Odiorne (1965: 60-66, 76-77).

CHAPTER 3

Proceedures and Methodology

Writing a strategic plan for the Defense Communications
Agency Technical and Management Information Center was
started with a review of the literature. An extensive,
if not exhaustive, literature search was conducted to locate
material available that purported to provide either evidence
of the usefulness of strategic planning or methods for such
planning. The review of the literature was an important part
of this project as it gave the needed background in strategic
planning as disclosed in the writings of some of the great
minds in the field.

While only a limited number of citations are noted in
this report, there is a wealth of available written material
on the subject. The reading, assimilation, critical
evaluation, and synthesis of this body of literature was a
most important part of this study. The literature search was
dynamic; continuing through the final draft of the plan and
this report. While time consuming, this literature review
was necessary because there was no suitable material found,
specifically directed toward strategic planning in special
libraries, and certainly no model for the DCA Technical and
Management Information Center.

Procedures

A plan-to-plan for the Defense Communications Agency was first drawn up. This plan-to-plan was based on a procedure whereby the Library Director, as planner, undertook to write down (1) what was to be in the final plan, (2) the methods that would be used to obtain information for the plan, and (3) the means to develop and execute the plan. The model developed thus became the first planning document.

The determination was made to, at this time, develop the strategic plan without new and explicit input from the library staff, management, or customers, although all but the latter were provided a copy of the written proposal to do the planning. This method was necessary as a result of the limitations that are stated in Chapter 1 of this paper.

The first requirement of the strategic planning project was to develop a Mission Statement. Environmental scanning and the internal audit leads the strategic planner to define the organization's mission and objectives. A clear case for the need for a mission statement is provided by Brown (1984: 44-52). The author writes that mission statements are particularly valuable in providing internal direction and discipline to the organization and a frame of reference for the entire planning process.

Once again, Drucker (1973: 75-98) has valuable concepts of the nature of the mission of an organization. He writes that the mission must be determined in order to have clear

and realistic objectives. The mission statement is the starting point for priorities, strategy, organizational structure, management and work assignments. Drucker writes that the method of finding a mission is to determine "what is our business" by focusing on the customer. There is a need to look at what needs the customer satisfies by using the product or service. Additionally, the questions must be asked, "what will the business be," and "what should the business be." Planned abandonment and change should be expected, according to Drucker.

Finding a mission in a sub-unit of a parent organization may be hard, according to Kastens (1977: 22-23) who says it may be necessary to "guess." If necessary, the manager should write the mission statement, attach it to any plans with the statement that the plans are based on the assumed mission. At least in submitting the plans to the next higher level of management, they will have to be forwarded up the line. If he or she won't do so, Kasten suggests that the planner consider "a change of venue."

Methodology

The key in any mission statement, according to Drucker (1969: 107), is to determine three facts. First, what degree of risk is the manager willing to take? Second, what business are you going to be in? This should fit the personality of the organization and be service or use

oriented. Finally, limitations should be defined in the mission statement.

While the TMIC did have such an official statement, it was considered outmoded and inadequate. The Mission statement was developed by an extensive review by the Library Director (planner) of the TMIC's current position - determining what is our environment, why do we exist, what products or services we provide, whom do we serve, and what are our limits. An external evaluation of significant events that could have an impact on the TMIC was then conducted, as was an internal evaluation. Some of the tools that were used are included in the appendices. Most are from the useful guide to strategic planning written by Rowe, Mason, and Dickel (1985). A list of major changes that were indicated was drawn up and a rough draft of a new mission statement was written. From this effort a final Mission Statement was written.

The primary objectives or what needs to be done for the planning period was next determined. These primary objectives were to lead to key result areas that had to be addressed in the planning framework. The primary objectives were stated in terms of performance over a specific time period, so that they could be used to both direct the staff and to measure progress in attaining the Mission. They were quantifiable, time-bounded, and realistically achievable within the planning period in question.

Having stated the primary objectives for achieving the Mission, the next step was to develop strategies for obtaining the objectives. This was done by listing several realistic strategy alternatives, and the assessing the external and internal risks of following each alternative. The various alternatives were then ranked according to risk so that the best strategy to meet the objective could be selected. The strategies for each objective were written to provide both the opportunity to meet the objective and the outline to fit needed change into the organization as new facts emerged.

Finally, provision was made to make the strategy happen. The best plan is only a plan if it does not "degenerate into work," according to Drucker (1973: 126-128). Therefore the environmental scan, internal audit, and mission and objectives lead to implementation. Drucker writes that key people have to work and management has to commit resources. Without these there are only promises. Again, he forcefully argues that plans that only provide for new and additional things will fail. Getting rid of the "old and tired" programs is required. Furthermore, long-range plans are meaningless. Action today is what defines a true plan from a dream.

The need for change in both internal capabilities and in links to the environment are detailed in Ansoff (1970: 62-63) as is the differentiation between "urgent" and "non-urgent"

changes. If changes are urgent a "coercive" strategy formulation and follow up is required and top management support is necessary. Non-urgent change can be used to transform an organization over time.

A typical implementation mode is described in Ansoff (1976: 72-74) where planning and learning is concurrent. This flexible approach uses combinations of trial and error, pilot studies, holding some strategies in reserve, etc. Odiorn (1965: 73-74) urges that the higher-level approval of plans be gained unless this "often delicate" task is taken, the subsequent plans are "likely to fail pretty badly."

Kastens (1977: 37-38) writes, in another context that if you don't have all the information theoretically necessary for a plan, it is better to guess. He feels that educated guesses are better then nothing and probably close-to-the-mark. It's necessary to make assumptions and to write them down so at least everyone concerned will know the basis for decisions.

All strategic planning concerns leadership and human activity. The literature in this area of strategic planning is extensive and the subject itself could easily be a separate research project. Ansoff (1979: 125-150) gives an excellent view of strategic leadership behavior. The leader must know what his or her own style and that of the parent organization is. If strategic leadership in a non-profit organization is absent, political influence will be rampant

as managers, technocrats, and administrators, lacking common purpose and personal commitment to the success of the institution, use it for their own purposes. Concerning strategic management and innovation in not-for-profit organizations, Ansoff is pessimistic. He feels the management of most such organizations are reactive, preferring to wait for problems to be brought to them, rather than seeking out opportunities. The manager who tries to change the organization beyond his or her authority will run into strong opposition.

Making decisions and taking risks is required of managers attempting to execute innovative strategic planning. Drucker (1973: 166) writes that service institutions need management that systematically focus themselves and their organizations on effectiveness, that is, on the right results. Using knowledge, common sense, and an organization orientation with adventurous, unconventional decisions can dramatically benefit an organization.

Lauffer (1984: 202) writes that if an idea is not exciting enough to keep the manager's interest, it is better to drop it or give it to somebody else. Further, he suggests that to get around the "approval process" it may be necessary to announce that you are going to do something without waiting for approval. This takes courage, but there is probably no way to do it without courage.

Anshen (1983:50-63) found that the development of a strategic plan may have to be done without help and with only the knowledge that not to plan will almost surely lead to eventual decline and almost certainly to technological obsolescence and lack of growth. Levinson and Rosenthal (1984: 259-283) writing about corporate leadership also found that risk-taking was a requirement for managers. Each of the leaders described in this book took his company in new directions while maintaining the basic functions of the organization.

In an excellent article on planning, Richman and Levy (1975: 37-42) discuss psychological barriers to planning. Internal politics can also destroy strategic planning writes Lauffer (1984:5), but can be overcome. First, have specific goals with measurable outputs. Second, use goals to allocate resources. Third, involve people in decision making. Fourth, critically evaluate and include assumptions in plans. Steiner (1979: 95-108), as always, provides useful help for dealing with the various human problems that will arise in the planning process. Drucker (1964: 149-150) writes that the manager must concentrate strength on the most important things. The best people should be used on the most important work and, if necessary, secondary work will just have to fend for itself.

As stated at the outset, throughout the entire process there was a need for continual reading of the literature,

reviewing of primary material available to the researcher, and most important, a process of thinking about the future of the special library in terms of what had to be done today to influence that future.

The final work of the research project was to write a strategic plan. This was done after the above was completed. The plan was written after determining what would be required in the plan, based on the previous analysis.

CHAPTER 4

Presentation of Results

There is a large body of literature available relevant to strategic planning in the special library. Most of the easily available literature is secondary, but helpful in planning. Literature on strategic planning for libraries, in general, was found to be in short supply and not particularly useful. The large body of information available required extensive time to locate, read, analyze, and synthesize. There was no doubt, particularly after writing the strategic plan, that the basic literature on business strategic planning methods could be used in planning for special libraries.

The result of the research project was finally a strategic plan that could be used in the Defense Communications Agency Technical and Management Information Center. This plan was used as a basis for management decision-making beginning in September, 1986. Additionally, examples of some of the methods used in arriving at this plan are provided in Apendices A-F.

As stated in Chapter 1, three hypotheses were considered.

Hypothesis I.

A strategic plan for the DCA Technical and Management Information Center can improve significantly its work.

The strategic plan that is presented below was immediately put into use. Some results were the continuation of key staff members in their positions despite a serious threat that the positions would be eliminated, a reorganija#ion of existing staff, and significant improvements in the operation of the branch library. More subjectively, the plan provided guidance to the TMIC management and staff concerning priorities and a renewed sense of mission and teamwork.

Hypothesis II.

> Strategic planning methods designed for, and
> commonly used in business, can be adapted for
> use in the DCA Technical and Management
> Information Center.

All of the methods used were based on those developed
for business and were relatively simple to adapt to the
special library. The most difficulty was in finding the
necessary time to do required research, writing of a formal
plan, and bringing the staff into the process.

Hypothesis III.

> A strategic plan designed for the DCA Technical
> and Management Information Center can be ↑?{
> implemented successfully through input from
> management and staff.

Bringing the staff into the planning process was done
almost immediately by holding a one-day seminar to discuss
the plan and to move more day-to-day decision-making and
supervision to the librarians. Bringing higher level
management into the planning process is expected to occur as
the Directorate of Personnel and Administration of DCA begins
its strategic planning process.

The strategic plan for the Defense Communications Agency Technical and Management Information Center that was finally arrived at is presented in the following pages. The plan was written to provide a reasonably stable framework to be used over the next five years, but at the same time is capable of modification as conditions change. Thus, most of the objectives were designed to be accomplished in about one year.

STRATEGIC PLAN FOR THE TECHNICAL AND MANAGEMENT
INFORMATION CENTER OF THE DEFENSE
COMMUNICATIONS AGENCY

SUMMARY STATEMENT OF THE
LIBRARY DIRECTOR

Is there a need for a first-class library in the Defense Communications Agency? I believe there is and that this need is shown by the work the library is doing for the Agency and for the national security of the United States. The library attempts, with the resources it has, to fulfill the needs of the Agency. An alternative possibility is suggested – the organization of a cooperative information center under DCA auspices. This center would be responsible for a comprehensive effort to gather, store, and disseminate information on command, control, and communications. Its services would be used by DCA, DoD and governmental agencies, and other authorized users. Military command, control and communication technology is among the fastest growing fields of national defense. Fiscal 1986 saw 7.0 % , or $20.7 billion, of the DoD Total Obligation Authority designated for command, control and communications. Since Fiscal 1982 the c^3 funding has increased in real terms and as a percentage of the overall DoD budget. The national commitment to improved c^3 capability as an underpinning to force readiness,

sustainability and deterrence is not likely to be drastically
altered in the near future by DOD budget restrictions. The
need for a strong defense will, however, require more
cooperation within the c^3 community to benefit from civilian
and defense research and development in telecommunications,
information resources management, and automatic data
processing. The revolutionary progress now underway in each
of those areas will continue into the indefinite future and
will generate enormous information requirements for the
people working in those areas.

The technical and scientific information now available,
and being generated at an increasing rate, is such that the
Defense Communications Agency must find new ways to meet its
own needs without expending additional funds and increasing
staff. Cooperative efforts with others in the field will be
required if the Agency is to maintain and improve its access
to important information. What is often viewed as a problem
- how to provide necessary library and information services -
should be viewed as an opportunity for the Agency to take the
lead in developing a coordinated, cooperative effort to
centralize many of the library and research functions in the
c^3 field and to be sure important information is both
protected and made available to those who need the
information.

The Defense Communications Agency has a long record of
successful cooperation and service with the National

Communications System, the National Coordinating Center, as well as with, defense and other governmental agencies, military departments and contractors in a variety of programs. The Agency should consider investing in the exploration of the possibility of organizing, under Agency management, a cooperative information center that will meet its needs and those of the wider C^3 community. As a major agency in the field, the Defense Communications Agency should benefit greatly from such a center.

This plan, therefore, includes the development of a proposal to determine the need and feasibility of such a center. Ideally, this project should be undertaken as soon as possible, should have both top-level and Agency-wide support, and be conducted by outside contractors working with the Technical and Management Information Center and other Agency staff, as appropriate.

During this phase the current Technical and Management Center should continue to be funded and staffed at current levels. If a need for such a center is found, its establishment is feasible, and it is indeed developed, there would be an opportunity to reduce the staff in the Technical and Management Center and perhaps in other areas of the Agency. An Agency requirement will be met for years to come without the addition of staff and funding that would be necessary if the Technical and Management Information Center continues on its current course.

MISSION

THE TECHNICAL AND MANAGEMENT INFORMATION CENTER IS COMMITTED
TO A STRONG NATIONAL DEFENSE THAT REQUIRES EFFECTIVE COMMAND,
CONTROL, AND COMMUNICATIONS. THIS IS THE BASIS OF ALL OUR
WORK. WE STRIVE TO PROVIDE THE DEFENSE COMMUNICATIONS AGENCY
STAFF, AND OTHERS IN THE NATIONAL SECURITY COMMUNITY, WITH
LIBRARY AND INFORMATION SERVICES DEDICATED TO CURRENT AND
EMERGING ISSUES IN OUR FIELD. WE WILL BE LIMITED ONLY BY THE
RESOURCES ENTRUSTED TO US IN THE ACHIEVEMENT OF THIS MISSION.

BACKGROUND INFORMATION

The Technical and Management Information Center of DCA
is a special library located at the Headquarters of the
Agency. It provides different levels of information services
to about 4000 DCA employees at Headquarters, field
activities, and field organizations, including the White
House Communications Agency and Defense Commercial
Communications Office.

Through informal networking and traditional reciprocal
library cooperation, the Center receives help from, and
assists other federal government agencies, DoD organizations,
defense contractors, libraries and information centers, and
the public. The degree of such service and cooperation is
dependent largely on the resources of the Center, but is an
important component of the work.

Since 1983 the Technical and Management Information
Center has been faced with critical organizational and
resource problems as a result of the consolidation of four
DCA libraries into the Center. At the same time the staff was
reduced to three permanent, full-time professional librarians
without clerical support. The Agency provided no effective
guidance on how the consolidated organization would be
organized or operated, nor did it provide information on what
was considered important work to be continued with the

available staff. As a result, the newly appointed Library
Director undertook to set priorities, organized, and operated
the Center on the basis of incomplete information and a
perceived need to both maintain the organization at a
survival level and lay the groundwork for improved
performance.

Careful management of the available technical,
financial, and human resources and dedicated, hard work by
the remaining staff resulted in the achievement of those
initial goals. The Center has been improved by instituting
many changes, including increased automation and better
procedures to provide improved customer services. The
Library Director convinced Agency management of the
requirement to authorize the hiring of additional temporary
staff and to change position descriptions of existing staff
to meet today's information needs. In August 1986 the Center
had four permanent and two temporary professional librarians
positions; three part-time library and information science
graduate students; a part-time technical undergraduate
student; and five full-time undergraduate students for summer
employment only. This was the highest level of employment in
at least the past three years.

ASSUMPTIONS

Evaluating the external and internal condition of the Technical and Management Information Center leads to several assumptions.

1. DCA has provided limited information about our mission and objectives. The MISSION STATEMENT provided in this plan is what the Library Director thinks we should be doing. The plan is based on the MISSION STATEMENT.

2. Technology in library and information science will continue to change the way we do our work and the cost of this technology will not decrease.

3. Demand for services will increase at the current high rate.

4. There is little chance that DCA will provide significant additional funding for modernization of the Center.

5. There is little chance that DCA will provide more staff over the long-term to meet the needs of the Center.

6. Opportunities for improving the capabilities of the Center exist, but require innovations and a willingness by the Agency to experiment.

7. The Center has a highly-qualified, experienced core of professionals dedicated to improving library and information services. Technologically, the Center is poised to take advantage of most of the current advances in computers and telecommunications relating to information processing.

8.   The Center has developed its service-orientation, but lacks enough resources to meet fully the needs of DCA.

   9.   Without strategic change now, the Center will drift on a day-by-day basis and finally decline.

10.   The current management and staff will need the help of the Agency and outside help to institute significant change.

OBJECTIVES AND STRATEGIES

(In Order of Priority)

1. Objective/Target Date: During FY 87 obtain funds and contract for a needs assessment/feasibility study for a DCA sponsored, cooperative Information Center.

Strategy: Present this plan to supervisor. Discuss best way to present this to higher levels of management, if supervisor agrees. If funding is assured, draw up necessary statement of work and follow up with contracting staff to assure that contract is obtained that will result in a report of the study received as soon as possible in the fiscal year.

Rationale: The funding and staffing of the Center will become critical soon. Efforts now used to obtain temporary help could better be used to find a long-range solution to provide services and take advantage of current opportunities.

Resources: These will have to come from additional funding and use of contractor support. The project is too important and big for the limited staff available. The Library Director and staff can assist in formulating statement of work and providing other guidance to the contractor. Other Agency staff will need to be available to evaluate any alternative and help to implement. High-level management support is essential.

2. Objective/Target Date: By October 1 or before have permission to continue services of all temporary and student help for FY 87.

Strategy: Follow up efforts already made to obtain permission to continue or hire staff. Prepare contingency plans for any reduction in staff.

Rationale: Current staff is now fully occupied. Any reduction will require a reduction in services. Continuation will allow time to do essential work and try to obtain a long-range solution, as mentioned in 1 above. Reduction now will give time enough to draw up contingency plans.

Resources: Give high priority. Use management and staff.

3. Objective/Target Date: By October 30 obtain funding for ongoing programs and some additional for database searching; CD-ROM, and books. Draw up budget for 4 years by March 30, 1987.

Strategy: Present FY 87 requirements in October. Draw up budget required for next 4 years considering various alternatives.

Rationale: Reasonable assurances of funds for the year are necessary for continued operation.

Resources: Staff time and knowledge to put budget in order, submit and follow up.

4. Objective/Target Date: Maintain essential services.
Curtail activities that are worn-out or can be eliminated.

Strategy: By Nov 1, 1986 review work with staff to put in
priority order work now being done. Eliminate as much as
possible that falls into lower categories of priority. Use
additional time gained on high-priority activities.

Rationale: There may still be work being performed that
can be eliminated. Pareto Time Principle that 20 % of time
expended produces 80 % of results.

Resources: Available statistics and experience of staff.
Additional research on this. Staff support in DCA that
should be doing more work for us. Additional computerization
of functions. Training and other help in changing or
eliminating tasks. Ideas of staff.

5. Objective/Target Date: Immediate and continual follow up
efforts to procure and install all equipment, including the
Integrated Library System and LAN, by end of FY 87.

Strategy: Through proper channels put necessary pressure
on DCA support staff to take their responsibility for
obtaining and installing this equipment. Obtain formal
commitment from responsible officials, with likely timetable,
as to how and when equipment will be installed.

Rationale: Staff of unit is doing too much work of other
units. Equipment procurement and installation should be done
in professional way by other DCA staff. Calling attention to
this might help.

Resources: Staff meeting with peers. Documenting and following up all actions. Refusing to accept excuses or to take on work of others. Complaints up chain-of-command as required.

6. Objective/Target Date: Improve visibility of the Technical and Management Information Center by end of FY 87.

Strategy: Continue attempts to have brochure printed and if it is, be sure it is distributed widely in DCA. Organize more contact with both management and staff of DCA. Participate in DCA Newcomers Orientation. Consider other possible methods of publicity for the services available.

Rationale: "Customers" are not only those using the library, but management and peers. Development of these relationships will help in other objectives.

Resources: Mostly staff time to meet with management and staff of DCA in formal and informal ways. Possibly surveying to determine customer needs, perceptions, opinions.

7. Objective/Target Date: By end of FY 87 improve self-service reference for DCA staff.

Strategy: Conduct feasibility study of using CD-ROM or user access to online databases.

Rationale: Limited staff requires effort to provide more self-service for those that can benefit. Efforts needed to provide services that can be used by many, not just one person.

Resources: Staff expertise. Funding if it becomes available.

8. Objective/Target Date: Improve working conditions of staff, both permanent and temporary, during FY 87.

Strategy: Review all job descriptions and performance standards by December 1. Consider possibility of rotational assignments. Organize training to be sure it meets needs of the Agency, unit, and person involved, in that order. Hold 3-4 "listening meetings" per year. Hold 1 off-site training session in matter selected by staff. Encourage various levels of management to meet with staff and learn of work.

Rationale: One of "values" of library is to provide a good place to work that offers responsibility, job satisfaction, and career development. Staff needs to know that efforts are worthwhile.

Resources: DCA, library and outside consultants. Training opportunities. One-on-one meetings, staff meetings and other input.

9. Objective/Target Date: Continue to improve research abilities through the continual gathering of statistics of work output, benefits, costs, etc. and produce annual report by March 30, 1987.

Strategy: Survey available resources, statistical and other information now gathered. Determine necessary additional information, usefulness, and cost to obtain.

Consider user surveys to obtain more feedback. Use available computerization to obtain, store, and analyze statistic data according to scientifically proven techniques. Rationale: Statistical information is important to obtain an understanding of the operation of the library. Statistical reports are also required to improve operations and to back up requests for funding.

Resources: Currently generated statistics, staff, and computer help. Limited now, unless other work is reduced.

SCHEDULE AND EVALUATION

1986-87 OBJECTIVE	O	N	D	J	F	A	M	J	J	A	S	O
1. FEASIBILITY STUDY	XX	XX	XX	E1				E2				E3
2. STAFFING	E1											
3. FUNDING	XX	XX	XX	E1			XX	XX	E2			
4. SERVICES REVIEW	XX	XX	XX	E1					E2			E3
5. TECHNOLOGY	XX	XX	XX	E1	XX	XX	XX	E2	XX	XX	XX	E3
6. MARKETING	XX			XX			XX	XX	E1			
7. REFERENCE					XX	XX	XX	E1				
8. HUMAN RESOURCES				XX					XX		XX	E1
9. RESEARCH					XX	XX	XX	E1				

XX = Month when activities are expected to be done.

E1-3 = Scheduled evaluation of progress.

CONTINGENCY PLANS

The major difficulty expected is the lack of success in keeping our temporary and student employees. If we are unable to keep the employees, we will be forced to reduce services across the board or to contract out some of the work if the services are not to be reduced. We will need immediate help to even do the contracting out.

If contracting is not possible, many service cuts are expected. Reduced hours, limits on obtaining material from other libraries, and reduced purchasing of books and periodicals will be required. If any of the professional librarians leave and can be replaced, it is likely that the replacement will have to be a clerical employee or para-professional, to take up some of the work now done by the graduate students. There will be only one person in Reston who will, at best, only be able to meet the urgent and basic needs of the DCEC. We will not attempt to continue services to locations outside the Derey and Headquarters buildings, except as time and staff permit.

Subscription services will need to be cut deeply as this is a labor intensive part of the current operation. Cuts already made have reduced the workload to an acceptable level, but staff reductions will not permit the continuation of most of these services.

If the Agency cannot agree to the feasibility study of a
cooperative effort and feels that library and information
services should be continued at the current level, there is
no alternative than to staff properly and fund the library.
The library should have enough space, equipment, funds, and
staff to do its work. We will continue, as best we can, to
point this out to management, with the hope that eventually
others will see different possibilities or have new ideas
that will take advantage of the availability of the
information now needed by our Agency.

Chapter 5

Interpretation, Conclusions and Recommendations

The most difficult part of strategic planning is doing
it. As is evident in the previous chapter, there is no
scarcity of books and articles purporting to provide the
manager with multiple reasons why strategic planning is
necessary. This research report provides one more paper, but
it is a developmental approach and provides a view of how it
might be done in a special library.

Planning-to-plan, formal studying at the doctoral level
and in seminars, literature research, synthesizing of the
material, experimenting, and developing the strategic plan
that is presented above in Appendix 1 was a most difficult
exercise and not one to be taken lightly. After years of
planning-to-plan, drawing up a reasonable facsimile, at
least, of a strategic plan, the conclusion drawn is that the
first obstacle to overcome is an apparently natural
resistance to plan strategically.

Fortunately, in this research project, an important and
excellent article by Reichman and Levy (1975:37-42) about
psychological resistance to planning was found at a crucial
point in the study. Resistance to planning, according to the
authors, results from the planning process that in itself
produces four emotional conflicts that may be unconscious.

These conflicts are the authority conflict, fear of
uncertainty, fear of failure, and the indecisiveness
conflict.

Simply put, authority conflict in the planning process
appears as the planner's subconscious brings up childhood
memories of parental nagging to "plan ahead or you're going
to be in big trouble" (the term paper won't be done, you
won't get into college, etc. etc.). As an adult, the
planner, as the child before, rebels and resists planning
ahead. This type of behavior can be overcome by recognizing
it for what it is, understanding that planning is now an
adult activity, and is finally voluntary.

Facing uncertainty comes up when the authority conflict
is resolved and the planner next tries to run away from the
planning process by delaying or avoiding actions, or even
pretending there is no uncertainty. People do not like
uncertainty, but by not accepting it as a reality any plan
will lack creativity or innovation. Thus, the plan developed
in this research study accepts uncertainty as reality and
considers it in an open manner.

Closely tied to the uncertainty conflict is the fear of
failure and indecisiveness. None of us wants to fail. At
work we might consider this to be equal to failure as a
human. Fearing that we might fail, we again resist planning
or at least become indecisive. An alternative is to break
down our goals into final, intermediate, and immediate and to

accept and program for different levels of "success" not just success vs. failure. Again, the plan presented recognizes these conflicts and builds in flexibility to guard against doctrinaire statements of what will be considered a "successful policy outcome." Hopefully, planners will be able to reach their highest goal, but it is important to remember that the "300 hitter" in baseball is considered a valuable player even though that player is not hitting the ball (the goal) two out of three times and certainly not hitting a home run every time a hit is made. Peters and Austin writing in A Passion for Excellence (1985: 179-183) fairly extoll the virtue of failure to produce results.

Perhaps others will not have a problem getting started with comprehensive strategic planning, but there is another pitfall. There is little proof that strategic planning in any organization is going to result in the perfect, or even better environment, particularly in a special library. Nevertheless, this research shows that it is possible to do this type of planning for a special library and come up with a plan that can be used. Further work on actually trying to implement this plan will have to be done. This will be part of the work of the researcher and others in the coming year. The results will not be evident for some time to come.

As mentioned many times in this research project, there is an enormous amount of information on strategic planning. Much of this literature, however, is rather specialized, and

not particularly helpful. The works cited in this project
provide some indication of the literature that is helpful,
but even that selective bibliography is probably too much for
the average special library manager to read and absorb. The
truth is that the special librarian wanting to do a plan
should try to keep things as simple as possible and that
recommendation includes background reading.

A helpful procedure in this project was to write down
what was hoped for five years from now. That is, given the
best of all possible worlds, what should the library be in
five years? This procedure proved to be especially helpful
as the researcher was able to measure existing resources
against the hoped for long-range result. Writing down a
scenario for five years from now provides a certain amount of
discipline to the planner, but not too much to stifle
creativity. Reading in the field of futurology, science
fiction, creativity, and similar areas helps to get the
creative juices going for this type of exercise and it is
useful, especially if you are bogged down in the mundane.
Also, this step can be completed by the library manager or it
can be a group effort and most likely should be. In the case
of this research the effort was an individual one. The next
step is to bring the staff into this process for the next go-
around of planning.

A strong word of caution is necessary. Planning is not an easy process or one that takes a few minutes. The researcher was fortunate in having received a sabbatical of nearly four months that was used almost exclusively for this project. An average of eight to ten hours per day was needed to complete the first good draft of the research paper in those four months. A strategic plan alone would not take that long, but would probably take about two months of full time work. Also, the researcher had the advantage of having completed many planning projects for the DCA library including a series of three studies for automation and many for operational matters over a period of three years. Furthermore, the researcher was, as the manager of the special library, given freedom to innovate, take risks, and generally run the library without too much outside control. In some ways this was helpful, while in others it created the classic problem of the small business entrepreneur running the business without much input from anyone else. This situation existed during the planning stage, and as a result there was little input from the staff. One of the hoped for results of this planning, however, is to develop stronger participation from the staff and others in the Agency in the management of the library.

The point to be made, if it has not already been, is that the strategic planning process will take time. If the library manager has to do it alone, that time will come out

of his or her limited time. If staff members or others are involved, even more time will be involved. The amount of work that can be done is probably endless. During the research many avenues of exploration had to dropped because of a lack of resources or time. An entire six months preliminary work on doing a particular type of survey was finally discarded after it became evident that the survey would be so complicated that a plan would never materialize from the results. Finally, many of the parts to the plan will, as Peter Drucker says, have to degenerate into work before they become a reality. This will be the challenge. This plan has been given to management and will, after outside peer review, be used to further efforts to improve the DCA Technical and Management Information Center and, in a modest way, the national security. A separate version is being prepared for submission to a library science publication in order to contribute to practice in the field and a more ambitious book on strategic planning for special libraries is planned.

APPENDIX A

Strategic Four Factor Analysis
DCA Technical and Management
Information Center

EXTERNAL ENVIRONMENT/STRATEGIC PLAN

Limited information available from
higher level management concerning
our Technical and Management
Information Center's mission and
objectives. Never consulted on
impact DCA programs will have on
our functioning. Technology is
rapidly changing the way we work
and we have received good support
for computer use during past six
months. Continued high level of
activity expected DCA mission
areas.

/ | \

RESOURCE REQUIREMENTS CONSIDERATIONS	ORGANIZATIONAL
Funding is not programmed directly, being included in other parts of budget. Do not have sufficient input into 5 year plans and budgets. Usually must "beg" for funds. Same holds true for staff. Staff is chronically low and mostly temporary, but still highly professional and motivated.	Center is part of "operating core" of Agency directly working on mission projects. Center, however, is in the Administrative sector and does not have same mission as either Division or the Directorate. Also, center is physically in bad space, in two locales trying to serve widely dispersed locations.

\ | /

INTERNAL ENVIRONMENT

The Center survived catastrophic
cutback in staff, rebuilding to
what is now a much improved
operation. Now has the core of
an excellent special library if
weaknesses can be eliminated
Improve reference services
that are closer to customer.
Need larger, more comprehensive
book, journal, document, report,
collections and user operated
databases. Have good
research, testing, and evaluation
in library and information field.

APPENDIX B

Capability Profile

DCA Technical and Management Information Center

Managerial

	Weakness	Normal	Strength
1. Library Image, Social Responsibility		xxxxxx	
2. Strategic Planning		xxxxxxxxx	
3. Environmental Assessment		xxxxxxxxx	
4. Speed of Response to Changing Conditions		xxxxxxxxxxxx	
5. Flexibility of Organizational Structure		xxxxx	
6. Management Communication and Control		xxxxx	
7. Entrepreneurial Orientation		xxxxxxxxxxxxxxx	
8. Ability to Attract and Retain Highly Creative People		xxxxxxxxxxxxxx	
9. Ability to Meet Changing Technology		xxxxxxxxxxxxxx	
10. Agressiveness		xxx	

Competitive

	Weakness	Normal	Strength
1. Product Strength, Quality, Uniqueness		xxxxxxxxxxx	
2. Patron Loyality and Satisfaction		xxxxxx	
3. Market Share		xxxx	
4. R&D in New Services		xxxxxxxxxxxxxxxxxx	
5. Supplier Strenth and Material		xxxxx	
6. Customer Concentration	xxxxxxxxxxx		

Financial

	Weakness	Normal	Strength
1. Access to Funds When Needed	xxxxxxxxxxxxxx		
2. Degree of Capacity Utilization		xxxxxx	
3. Ease of Exit From Some Services		xxx	
4. Availability of Current Funding		xxx	
5. Funding Stability	xxxxxxxxxxxxx		
6. Costs Stability		xxxxxx	
7. Availability of Funding for People	xxxxxxxxxxxxx		

Technical

	Weakness	Normal	Strength
1. Technical and Professional Skills			xxxxxxxxxxxxxxxxxxx
2. Resource and Staff Utilization			xxxxxxxxxxxx
3. Level of Technology Used in Services			xxxxxxxxxxxxx
4. Services Effectiveness and Speed		xxxx	
5. Value Added to Product			xxxxxxxxxxx
6. Intensity of Labor	xxxxxxxxxxxx		
7. Economies of Scale	xxxxxxxxxxxx		
8. News of Plant and Equipment		xxxxxxxx	
9. Application of Computer Technology			xxxxxxxxxxxxxxx

ANALYSIS: While this is a highly subjective review by the Center's Manager, it can point to some major concerns that should be addressed. The major concern is obtaining resources necessary for continuation, stability, and improvement of the services. These resources include funding and staffing.

APPENDIX C

WOTS-UP Analysis

DCA Technical and Management
Information Center

Opportunities   Threats

Increasing DCA automation   Too slow installation to help
Continuing U.S. need for C^3 Budget cuts in DCA*
Continuing high defense budget   Greatly reduced defense budget*
New technology we can use   Lack of funds to purchase/use*
Only library for C^3 Possible staffing cuts*
Improved computer use   Lack of strong support in DCA
New Building will help
  concentration of patrons   Same or worse physical plant
Users appreciate library   A-76 Action
Reduction in DCA staff and
  funds could require our
  innovative help to get
  job done.

Strengths   Weaknesses

Innovative management*   Management not "well-connected"
Professional, motivated   Staff overtraining for jobs
  dedicated staff*   Staff requires too much
Better automation   supervision
Reasonable support from
  patrons   No organized patron support
Core staff is now very   Patrons too spread out
  strong, at take-off   geographically
Strong service orientatation   Take too much time on support
Good planning underway*   functions for staff of Center
Good use of R&D   Using too much time on non-
                                       professional work.

*critical elements

Appendix D

Vulnerability Analysis

DCA Technical and Management Information Center

Twelve items constitute the underpinnings of the
organization. Each underpinning is written, followed by the
most likely threat and consequences if the threat materializes.
The vulnerability of the organization to each threat and to all
threats together is measured by the calculation of impact,
probability, and finally by the ability of the organization
to defend itself.

Impact is measured on a scale of 0 to 10 with 0 = None and
10 = Catastrophic. The probability of an event is expressed as a
percentage of probability of the threat happening, and the
ability to react is rated on a scale of 0 to 10 with 0 = No Means of
Defense and 10 = Easily Absorbed. The Vulnerability Assessment is
determined by calculating the Impact of the Threat (Impact X
Probability) and entering this result on the Vulnerabiility
Assessment Chart (below).

The ability to react is entered, as well, and the point of
intersection on the chart shows the vulnerability area. Each
underpinning and the average of all can be calculated using this
method.

The following example shows the calculation for a single
underpinning.

1.   Underpinning: Needs and Wants Served: Providing knowledge
to DCA staff through professional library and information services.

Threat: Agency does not supply sufficient resources to
continue viable operation.

Consequence: Operation will revert to previous inefficiency
and eventually cease to be able to provide services expected.

```
    Impact                    =   10
    Probability               =   .30
    Reaction                  =   4
    Vulnerability Assessment  =   IV
```

```
Impact (10) X Probability (.30) = 3
Reaction                        = 4
```

The result is entered on the chart below (1).
Average of all calculations is entered (a).

The quadrants in the chart are:

I   = Defenseless: ORGANIZATION IS ALMOST DEFENSELESS AND
                     IMMEDIATE ACTION IS NECESSARY TO CORRECT.

II = Dangerous: THREATS ARE STILL POTENTIALLY DANGEROUS BUT
                     ORGANIZATION CAN MAKE CONTINGENCY PLANS AND
                     SHOULD.
III = Prepared: ORGANIZATION IS PREPARED TO DEAL WITH THE
                     THREATS.

IV = Vulnerable: LIGHT TO MODERATE THREATS THAT REQUIRE LITTLE
                     ACTION NOW FOR THE ORGANIZATION. WHILE IT IS
                     NOT NECESSARY TO HAVE EXPLICIT CONTINGENCY
                     PLANS, MONITORING IS NECESSARY TO BE SURE THE
                     THREAT IS NOT INCREASING.

Vulnerability assessment chart

```
   High
          10 |---------------------------|---------------------------|
             |                           |                           |
      O    9 |     DEFENSELESS           |       DANGEROUS            |
             |                           |                           |
 I    F    8 |                           |                           |
             |                           |                           |
 M         7 |          I                |          II               |
             |                           |                           |
 P         6 |                           |                           |
             |                           |                           |
 A    T    5 |---------------------------|---------------------------|
             |                           |                           |
 C    H    4 |                (a)        |                           |
             |                           |                           |
 T    R    3 |     VULNERABLE  (1)       |       PREPARED            |
             |                           |                           |
      E    2 |                           |                           |
             |                           |                           |
      A    1 |          IV               |          III              |
             |                           |                           |
      T    0 |                           |                           |
 Low         ---------------------------------------------------------
             0    1    2    3    4    5    6    7    8    9    10
             Low                                          High
                     Ability to React or Retaliate
```

Vulnerability Analysis (All Underpinnings)

1. Underpinning: Provide critical knowledge to DCA staff through professional library and information services.

   Threat: Agency does not supply sufficient resources to continue viable operation.

   Consequence: Operation will revert to previous inefficiency and eventually cease to be able to provide services expected.

```
Impact                      =  10
Probability                 =  .30
Reaction                    =  4
Vulnerability Assessment    =  IV
```
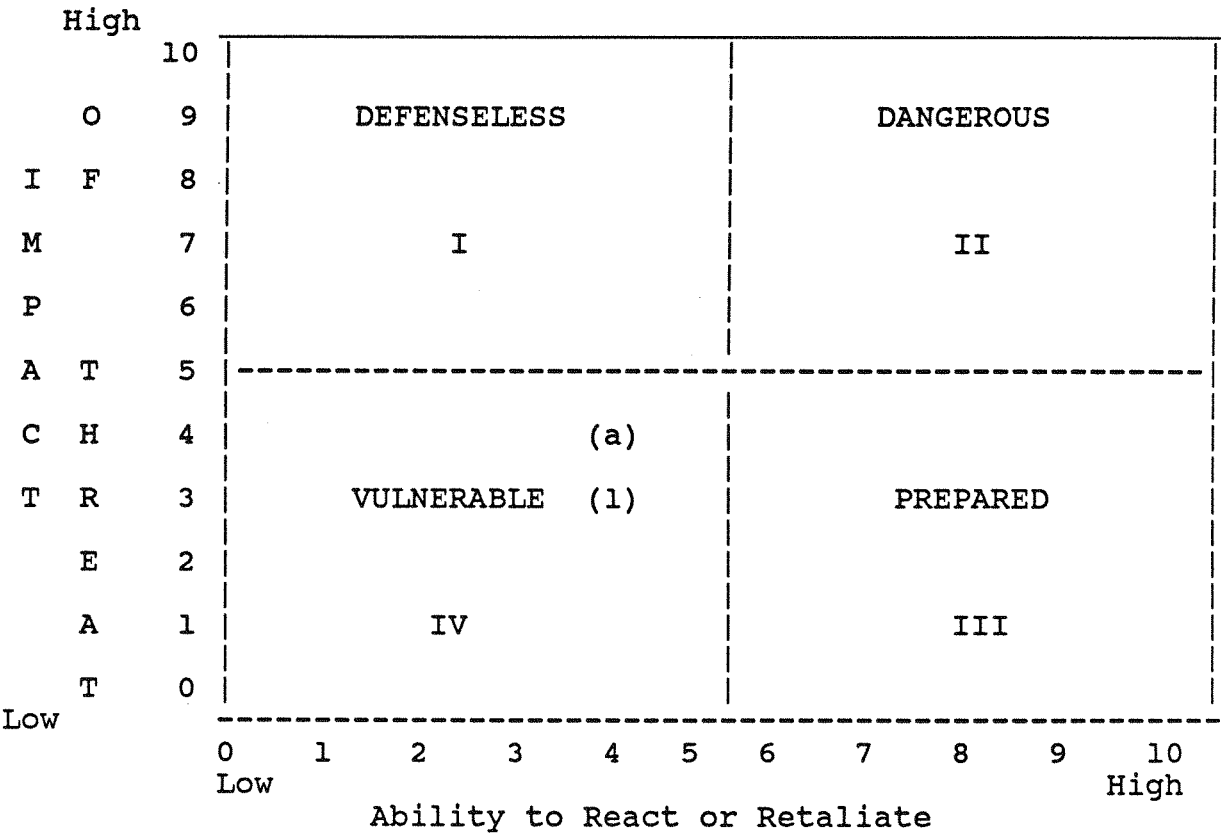
```
Impact (10) X Probability (.30) = 3
Reaction                        = 4
```

2. Underpinning: Current Staffing.

   Threat: Agency cuts back all temporary, student, summer help.

   Consequence: Operation will revert to previous inefficiency and cease to provide services expected.

```
Impact                      =  6
Probability                 =  .60
Reaction                    =  4
Vulnerability Assessment    =  IV
Impact (10) X Probability (.30) = 3
Reaction                        = 4
Vulnerability Assessment        = IV
```

3. Underpinning: Ability to deliver services at reasonable cost.

   Threat: Agency finds outside contractor that is able to reduce costs.

   Consequence: Library will be contracted out.

```
Impact                      =  10
Probability                 =  .60
Reaction                    =  4
Vulnerability Assessment    =  I
```

```
Impact (10) X Probability (.60) = 6
Reaction                        = 4
```

4. Underpinning: Large patron base.

Threat: Lack of concentration impedes ability to supply all services requested of library.

Consequence: Unable to meet all patron needs, services decline, complaints rise, management displeasure.

```
Impact                        =  60
Probability                   = .80
Reaction                      =  4
Vulnerability Assessment =  IV
```

Impact (6) X Probability (.80) = 4.8
Reaction   = 4

5. Underpinning: Technology base good and improving quickly.

Threat: Agency does not supply sufficient resources to continue viable operation.

Consequence: Operation will revert to previous inefficiency and eventually cease to be able to innovate.

```
Impact                        =  6
Probability                   = .70
Reaction                      =  4
Vulnerability Assessment =  IV
```

Impact (6) X Probability (.70) = 4.2
Reaction   = 4

6. Underpinning: Special skills - Only DCA organization currently available to provide DCA professional library and information services.

Threat: Agency contracts out or decides to do without.

Consequence: Library contracted out or out of operation.

```
Impact                        =  10
Probability                   = .60
Reaction                      =  4
Vulnerability Assessment =  I
```

Impact (10) X Probability (.60) = 6
Reaction   = 4

7. Underpinning: Library has developed good identity and image for service and has plans for improving both.

Threat: Agency folds library into another organization or impredes development of identity and image building.

Consequence: Loss of atrons and manageZent support.

```
Impact                     =  4
Probability                = .60
Reaction                   =  4
Vulnerability Assessment =  IV
```

Impact (4) X Probability (.60) = 2.4
Reaction   = 4

8. Underpinning: Difficulty for Agency to find replacement for services provided.

Threat: Agency does not care and decides to try anyway.

Consequence: More work to prevent this and loss of ability to operate library and information services.

```
Impact                     =  10
Probability                = .60
Reaction                   =  4
Vulnerability Assessment =  I
```

Impact (10) X Probability (.60) = 6
Reaction   = 4

9. Underpinning: High degree of professionalism of staff.

Threat: Grade reduction, lack of training, or use of non-professionals degrades services.

Consequence: Operation will revert to previous inefficiency and eventually cease to be able to provide services expected.

```
Impact                     =  10
Probability                = .20
Reaction                   =  8
Vulnerability Assessment =  III
```

Impact (10) X Probability (.20) = 2
Reaction   = 8

10. Underpinning: Library provides classified storage, retrieval and dissemination.

Threat: Agency transfers classified responsibilities to another unit.

Consequence: Major function of library is eliminated.

```
Impact                      =  10
Probability                 =  .80
Reaction                    =  4
Vulnerability Assessment =   I
```

Impact (10) X Probability (.80) = 8
Reaction   = 4

11. Underpinning: Patron goodwill.

Threat: Patrons do not help if library existance is in question.

Consequence: Library staff will need to devote too much time defending position and services will suffer.

```
Impact                      =  8
Probability                 =  .40
Reaction                    =  4
Vulnerability Assessment =   IV
```

Impact (8) X Probability (.40) = 3.2
Reaction   = 4

12. Underpinning: Library provides ego satisfaction to management, help in recruiting and retention, and morale support.

Threat: Agency decides none of above are enough reason to continue operation and removes this type of support.

Consequence: Operation will lose some resources and easy help to move ahead.

```
Impact                      =  7
Probability                 =  .40
Reaction                    =  7
Vulnerability Assessment =   III
```

Impact (7) X Probability (.40) = 2.8
Reaction   = 7

APPENDIX E

Hieracy of Values   DCA Technical and Management
                                           Information Center

Organization's Basic Values and Purposes:

    To work directly with DCA management and staff to help make
a significant contribution to the national defense through
library and information science techniques. Institutionalization
of an information resource in the field of C^3 that has the
primary value of being the best possible organization of its kind
in the world. Internally, the organization is devoted to
excellence in all its work, including the working conditions and
careers of its staff.

Grand Strategy:

    The Technical and Management will promote the use of library
and information science methods to meet national security needs
in the area of command, control and communications.
Comprehensiveness, accuracy, reliability of delivery, timeliness,
contributions to national defense, and cost savings will be
prime considerations in any activity.

Enterprise Goals:

    Development, management and delivery of a range of library
and information services through the use a rational planning
methods, strategic management, and innovation.

Objectives:

    Maintain the present capacity of the organization.
    Gain acceptance of the ability to plan for a better
        organizational structure.
    Organize the best resource available in the field of
        command, control and communications.

Strategic Alternatives:

    Secure long-term commitment from DCA to develop this
        organization within DCA.

    Secure long-term funding to maintain current organization
        while working with other interested DoD, USG, business, and
        academic institutions to explore alternatives.

    Stop trying to develop DCA organization and work to develop
        another organization with DCA support and that of other
        interested DoD, USG, business, academic, and other
        groups to develop an alternative organization.

Policies and Plans:

Maintain the status quo in funding and staff.

Advise supervisor of plans.

Develop consensus inside and outside DCA for
alternative organization

Develop concrete plans for new organization

APPENDIX F

Key Result Objectives   DCA Technical and Management
Strategy III   Information Center

1. Consensus Development

      Objective: Consensus with DCA and C↑3 community that
                  alternative information resources in field
                  is desirable and feasible

      Measure of Performance:

              Organized group in favor of project.

2. Innovation:

      Objective: Develop alternative information resource
                  within 3 years.

      Measure of performance:

              Existance of alternative

3. Human Organization:

      Objective: Gradually reduce number of employees
                 in DCA Technical and Management
                 Information Center and other DCA units
                 performing similar work as alternative
                 organization.

      Measure of Peformance

              DCA employees reduced to fewest required to
              service DCA only.

4. Financial Resources

      Objective: Obtain funds for feasibilty study.

                  Determine funds necessary and possible
                  resources for alternative
                  by March 1987.

                  Secure funding for alternative organization

      Measure of Performance: Financial plan available by
                               June 1987. Funding available
                               for alternative resource in
                               three years.

5. Physical Resources

    Objective: Determine   physical   resources   necessary   for
                  alternative organization by March 1987.

    Measure of Performance: Physical plan available.

6. Productivity

    Objective: Obtain possible productivity gains from
                 alternative by March 1987.

    Measure of Performance: Report on possible productivity
                              gains.

7. National Security Responsibilities

    Objective: Cost/benefit analysis of alternative
                 by March 1987.

    Measure of Performance: Report available.

8. Cost Savings

    Objective: Determine cost savings by March 1987

    Measure of Performance: Report available

Works Cited

Anshen, Melvin. "The Management of Ideas." Strategic
    Management. Ed. Richard G. Hammermesh. New York:
    Wiley, 1983.

Ansoff, H. Igor. Corporate Strategy. New York: McGraw-Hill,
    1965.

--- . Strategic Management. New York: Wiley, 1979.

Ansoff, H. Igor, Roger P. Declerck, and Robert L. Hayes, eds.
    From Strategic Planning to Strategic Management. New York:
    Wiley, 1976.

Brown, James K. "Corporate Soul Searching: The Power of
    Mission Statements." Across The Board 21, no. 3 (March
    1984): 44-52.

Charan, Ram, Charles Hofer, and John F. Mahon. "From
    Entrepreneurial to Professional Management: A Set of
    Guidelines." Journal of Small Business Management 18, no. 1
    (January 1980): 1-10.

Chandler, Alfred D. Jr. Strategy and Structure. Garden
    City: Doubleday, 1966.

Cohn, Theodore and Roy Lindber. Survival and Growth:
    Management Strategies for the Small Firm. New York:
    AMACOM, 1974.

Dollinger, Marc J. "Environmental Contact and Financial
    Performance of the Small Firm." Journal of Small
    Business Management 23, no. 1 (January 1985): 24-30.

Diebold, John. "The Information Explosion." Preparing
    Tomorrow's Business Leaders Today. Ed. Peter F. Drucker.
    Englewood Cliffs: Prentice Hall, 1969.

Drucker, Peter F. Managing for Results. New York: Harper &
    Row, 1964.

--- . Management Tasks-Responsibilities-Practices. New York:
    Harper & Row, 1973.

--- . Innovation and Entrepreneurship: Practices and
    Principles. New York: Harper & Row, 1985.

Drucker, Peter F. ed. "Managing for Business Effectiveness." Strategic Management. New York: Wiley, 1983.

Fry, Fred L. and Charles R. Stoner. "Business Plans: Two Major Types." Journal of Small Business Management 23, no. 1 (January 1985): 1-6.

Gray, Daniel. "Uses and Misuses of Strategic Planning." Harvard Business Review 64, no. 1 (January-February 1986): 89-97.

Guerriero, Donald A. Development of a Database Design for Serials Control in the Defense Communications Agency. Defense Technical Information Center. Report No. ADA162203. Washington: National Technical Information Service, 1985.

--- . Feasibility Study for a Computerized Serials Control System in the Defense Communications Agency Technical and Management Information Center. Defense Technical Information Center Report No. ADA162010. Washington: National Technical Information Center, 1984.

--- . A Model for the Strategic Plan of the Defense Communications Agency Technical and Management Information Center. Doctor of Arts Practicum, Nova University, Fort Lauderdale, Florida, 1985.

--- . Using Online Databases to Determine the Correlation Between Ranked Lists of Journals. Defense Technical Information Center Report. Washington: National Technical Information Center, 1984.

Haselhoff, Frits. "A New Paradigm for the Study of Organizational Goals." From Strategic Planning to Strategic Management. Eds. Igor H. Ansoff, Roger P. Declerck, and Robert L. Hayes. New York: Wiley, 1983.

Hitch, Charles J. Decision-Making for Defense. Berkeley: University of California Press, 1966.

Hofer, Charles, W. "Research on Strategic Planning: A Survey of Past Studies and Suggestions for Future Efforts." Journal of Economics and Business 28, no. 3 (Spring-Summer 1976): 261-286.

--- . "Toward Contingency Theory of Business Strategy." Academy of Management Journal 18, no. 4 (December 1975): 784-810.

Hofer, Charles, W. and Dan Schendel. <u>Strategy Formulation:</u>
    <u>Analytical Concepts</u>. St. Paul: West Publishing Co.,
    1978.

Holloway, Clark and John A. Pearce, II. "Computer Assisted
    Strategic Planning." <u>Long Range Planning</u> 15, no. 4
    (April 1982):   56-63.

Jones, Robert E. "Internal Politics and the Strategic
    Business Plan." <u>Journal of Small Business Management</u>
    23, no. 1 (January 1985): 31-37.

Kami, Michael J. "Business Planning as Business
    Opportunity." <u>Preparing Tomorrow's Business Leaders</u>
    <u>Today</u>. Ed. Peter F. Drucker. Englewood Cliffs:
    Prentice Hall, 1969.

Kanter, Rosabeth Moss. <u>The Change Masters</u>. New York:
    Simon and Shuster, 1983.

Kastens, Merritt L. <u>Long-Range Planning for Your Business</u>.
    New York: AMACOM, 1977.

Kuhn, Thomas S. <u>The Essential Tension</u>. Chicago: The
    University of Chicago Press, 1977.

--- .Kuhn, Thomas S. <u>International Encyclopedia of Unified</u>
    <u>Science: The Structure of Scientific Revolution</u>. 2nd
    ed., Vol 2, No. 2, Chicago: University of Chicago Press,
    1970.

Kurke, Lance B. and Howard E. Aldrich. "Mintzberg Was
    Right!: A Replication and Extension of the Nature of
    Managerial Work." <u>Management Science</u> 29, No. 8 (August
    1983): 975-984.

Lauffer, Armand. <u>Strategic Marketing for Not-for-Profit</u>
    <u>Organizations</u>. New York: Free Press, 1984.

Lawrence, Paul R. and Jay W. Lorsch. <u>Organization and</u>
    <u>Environment: Managing Differentiation and Integration</u>.
    Boston: Harvard University, 1967.

Levinson, Harry and Stuart Rosenthal. <u>CEO: Corporate</u>
    <u>Leadership In Action</u>. New York: Basic Books, 1984.

Lindblom, Charles E. <u>The Policy-Making Process</u>. 2nd ed.
    Englewood Cliffs: Prentice-Hall, 1980.

Linneman, Robert E. and John D. Kennell. "Shirt-Sleeve
    Approach to Long Range Plans." <u>Harvard Business Review</u>
    55, no. 2 (March-April 1977): 141-150.

Mintzberg, Henry. "Strategy-Making in Three Modes." California Management Review 16, no. 2 (Winter 1973): 44-53.

--- . "Structure in 5's: A Synthesis of the Research on Organization Design." Management Science 26, no. 3 (March 1980): 322-341.

--- . The Structuring of Organizations: A Synthesis of the Research. Englewood Cliffs: Prentice-Hall, 1979.

Mintzberg, Henry and Alexandra McHugh. "Strategy Formation in an Adhocracy." Administrative Science Quarterly 30, no. 2 (June 1985): 160-195.

Mintzberg, Henry and James Waters. "Tracking Strategy in an Entrepreneurial Firm." Academy of Management Journal 25, no. 3 (September 1982): 465-499.

Odiorne, George S. Management by Objectives. New York: Pittman, 1965.

Ohmae, Kenichi. "Foresighted Management Decision Making: See the Options Before Planning Strategy." Management Review 71, no. 5 (May 1982): 46-57.

Orpen, Christopher. "The Effects of Long-Range Planning on Small Business Performance." Journal of Small Business Management 23, No. 1 (January 1985): 16-23.

Peters, Tom and Nancy Austin. A Passion for Excellence: The Leadership Difference. New York: Random House, 1985.

Pinchot, Gifford, III. Intrapreneuring. New York: Harper & Row, 1985.

Porter, Michael. Competitive Strategy: Techniques for Analyzing Industries and Competitors. New York: The Free Press, 1980.

Reichman, Walter and Marguerite Levy. "Psychological Restraints on Effective Planning." Management Review (October 1975): 37-42.

Riggs, Donald E. Strategic Planning for Library Managers. Phoenix: Oryx Press, 1984.

Rowe, Alan J., Richard O. Mason, and Karl E. Dickel. Strategic Management and Business Policy: A Methodological Approach. 2nd ed. Reading, MA: Addison-Wesley, 1985.

Sexton, Donald L. and Philip Van Auken. "A Longitudinal Study of Small Business Strategic Planning." Journal of Small Business Management 23, No. 1 (January 1985): 7 15.

Shuman, Jeffrey C., John J. Shaw, and Gerald Sussman. "Strategic Planning in Smaller Rapid Growth Companies." Long Range Planning 18, No. 6 (June 1985): 4853.

Steiner, George A. Strategic Planning. New York: Free Press, 1979.

Stonich, Paul J. and Susan Graham Wernecke. "Strategy Formulation: What to Avoid; How to Succeed." Management Review 71, No. 5 (May 1982): 2542.

Taylor, Bernard. "Strategic Planning: Which Which Style do You Need?" Long Range Planning 17, No. 3 (March 1984): 5162.

Thompson, Arthur A. and A.J. Strickland, Jr. Strategy Formulation and Implementation: The Tasks of the General Manager. Plano, TX: Business Publications, 1983.

Toffler, Alvin. Future Shock. New York: Random House, 1970.

____ . The Third Wave. New York: Morrow, 1980.

Ullrich, Robert A. "Organizational Desgin, Employee Motivation and the Support of Strategic Motivation." From Strategic Planning to Strategic Management. Eds. Igor H. Ansoff, Roger P. Declerck, and Robert L. Hayes. New York: Wiley, 1983.

Whitteker, James B. Strategic Planning in a Rapidly Changing Environment. Lexington, MA: Lexington Books, 1979.

Wright, William F. "Information Management: A Bibliography." Special Libraries 73, No. 4 (October 1982): 298310.

U.S. Defense Communications Agency. DCA Organization and Functions Manual. DCA Circular No. 6404521. Washington: Defense Communications Agency, 1984.

U.S. Defense Communications Agency. Directors Planning Guidance. [Winston D. Powers, LTG AF] Washington: Defense Communications Agency, 1986.

U.S. Department of Defense. Department of Defense Directive 5105.19. Washington: Department of Defense, 1978.